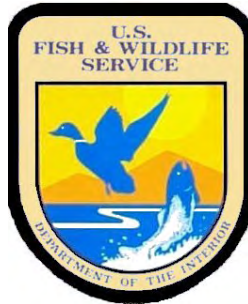


The Road Inventory of Crescent Lake National Wildlife Refuge Ellsworth, NE



Prepared By:
Federal Highway Administration
Central Federal Lands Highway Division
May 2008



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INTRODUCTION

The Transportation Equity Act for the 21st Century (Public Law 105-178) created the Refuge Roads Program. Refuge roads are those public roads that provide access to or within a unit of the National Wildlife Refuge System and for which title and maintenance responsibility is vested in the United States Government. Funds from the Highway Trust Fund are available for refuge roads and can be used by the station to pay the cost of:

- (a) Maintenance and improvements of refuge roads.
- (b) Maintenance and improvements of:
 - (1) Adjacent vehicle parking areas
 - (2) Provision for pedestrians and bicycles and
 - (3) Construction and reconstruction of roadside rest areas that are located in or adjacent to wildlife refuges
- (c) Administrative costs associated with such maintenance and improvements.

The funds available for refuge roads are to be disbursed based on the relative needs of the various refuges in the National Wildlife Refuge System, and taking into consideration:

- (a) The comprehensive conservation plan for each refuge;
- (b) The need for access as identified through land use planning; and
- (c) The impact of land use planning on existing transportation facilities.

To determine the relative needs of the U.S. Fish and Wildlife Service, the Federal Highway Administration (FHWA) was asked to inventory all public access roads and parking lots and provide a condition assessment of each. In 2008 the inventory was expanded to include administrative (service use only) roads in addition to public access roads. An FHWA representative meets with refuge personnel to identify route segments and assign route numbers and functional classifications (See Appendix) for each route. All roads and parking lots are mapped using Trimble GPS units and visually assessed for condition using the RSL method of evaluation developed at Utah State University (See Appendix). Culverts, Gates, Guardrails and Low Water Crossings are also mapped and inspected for any obvious defects.

An estimate is provided, in year 2008 dollars, based on the condition determined by the rating system. Estimates are based upon data and location factors from the 2008 RS Means Heavy Construction Cost Data 22nd Annual Edition. Cost estimates should be evaluated on a case-by-case basis when being used for programming purposes.

In addition to this report, the FHWA will furnish the condition ratings of each route and segment to the Fish and Wildlife Service in a Microsoft Access database so the data can be included in their Real Property Inventory.

Crescent Lake NWR

Summaries

Route Miles and Percentages by Functional Class and Condition

F. C.	Condition Rating (Based on RSL)*										TOTAL MILES
	Excellent		Good		Fair		Poor		Failed		
	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%	
I	0.13	0.8%	5.10	32.6%	5.34	34.1%			5.10	32.5%	15.67
II	0.31	13.2%			2.05	86.8%					2.36
III											
IV	0.44	31.9%	0.52	37.8%	0.41	30.3%					1.37
V	0.16	0.6%	11.79	45.1%	12.00	45.9%	1.01	3.9%	0.87	3.3%	26.15
Totals	1.04	2.3%	17.41	38%	19.81	43.5%	1.01	2.2%	5.97	13.1%	45.55

*For a description of condition ratings for the various surface types see the Appendix.

Route Miles and Percentages by Surface Type and Condition

S. T.	Paved Condition Rating [Condition(RSL)]										TOTAL MILES
	Excellent (19-20)		Good (13-18)		Fair (7-12)		Poor (1-6)		Failed (0)		
	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%	
AS											
CO											
Totals											

S. T.	Unpaved Condition Rating [Condition(RSL)]										TOTAL MILES
	Excellent (8-10)		Good (5-7)		Fair (3-4)		Poor (1-2)		Failed (0)		
	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%	
GR	0.9	15.0%	5.10	85.0%							6.01
NA	0.14	0.8%	2.57	14.5%	9.88	55.9%			5.10	28.8%	17.69
PR			9.74	44.6%	9.93	45.4%	1.01	4.6%	0.87	4.0%	21.86
Totals	1.04	2.3%	17.41	38.2%	19.81	43.5%	1.01	2.2%	5.97	13.1%	45.55

Square Footage (Parking Areas)

S. T.	Condition Rating										Total Square Feet
	Excellent		Good		Fair		Poor		Failed		
	Square Feet	%	Square Feet	%	Square Feet	%	Square Feet	%	Square Feet	%	
AS											
CO											
GR			7745	38.2%	12533	61.8%					20278
NA			7010	11.1%	36776	58.3%	19249	30.5%			63035
PR											
Totals			14755	17.7%	49309	59.2%	19249	23.1%			83313

Crescent Lake NWR

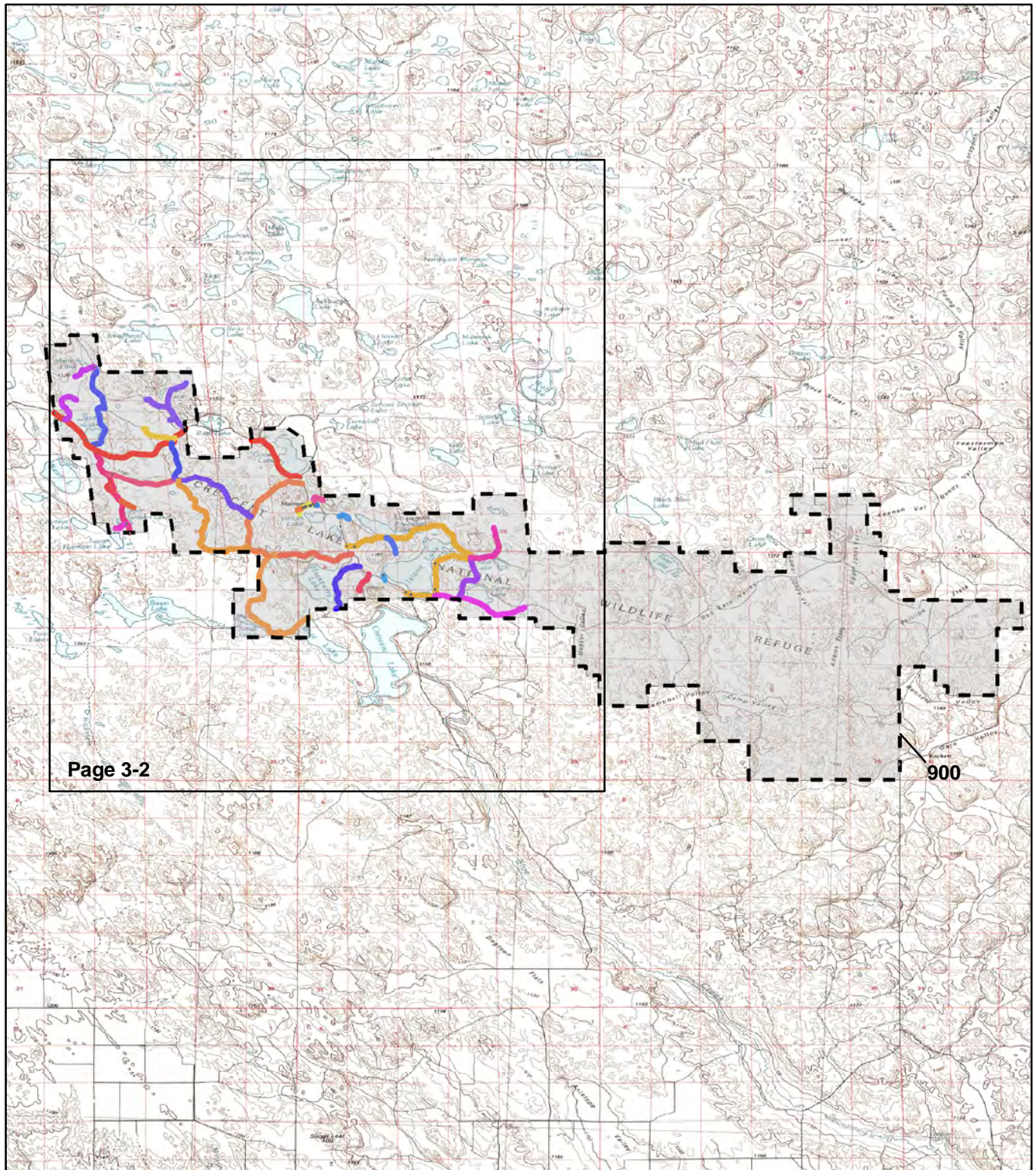
Summaries

Route Miles and Percentages by Use Type and Condition

USE TYPE	Road Condition Rating: Public/Administrative Use										TOTAL MILES	PERCENT TOTAL MILES
	Excellent		Good		Fair		Poor		Failed			
	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%		
Public (FC I-III)	0.44	2.4%	5.10	28.3%	7.39	41.0%			5.1	28.3%	18.03	40%
Admin (FC IV-V)	0.60	2.2%	12.31	44.7%	12.73	46.3%	1.01	3.7%	.87	3.2%	27.52	60%
Totals	1.04	2.3%	17.41	38%	20.12	44.2%	1.01	2.2%	5.97	13.1%	45.55	

USE TYPE	Parking Condition Rating										Total Square Feet	PERCENT TOTAL SF
	Excellent		Good		Fair		Poor		Failed			
	Square Feet	%	Square Feet	%	Square Feet	%	Square Feet	%	Square Feet	%		
Public			4899.00	8.0%	40740.00	66.9%	15294.00	25.1%			60933	73%
Admin			9856.00	44%	8569.00	38.3%	3955	17.7%			22380	27%
Totals			14755	17.7%	49309	59.2%	19249	23.1%			83313	

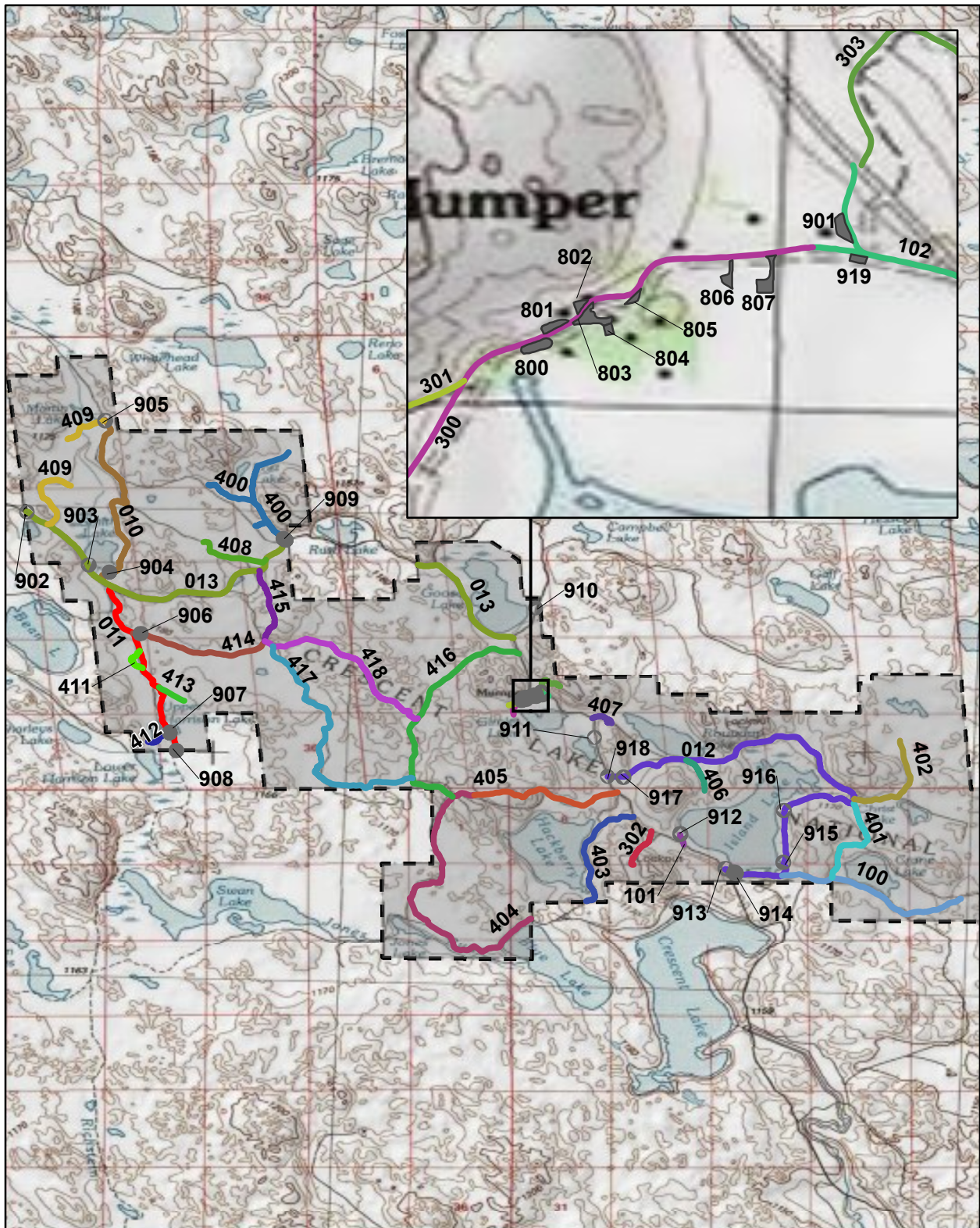
CRESCENT LAKE NATIONAL WILDLIFE REFUGE ROUTE LOCATION MAP



0 2.5 5 10 15 Miles



CRESCENT LAKE NATIONAL WILDLIFE REFUGE ROUTE LOCATION MAP 2



0 1 2 4 6 Miles

Crescent Lake NWR - 64510 - ROUTE IDENTIFICATION LIST (NUMERIC)

Shading Color Key:

White = Paved Routes
Yellow = Unpaved Routes

RTE #	Asset Number	ROUTE NAME	RTE MI	ROUTE DESCRIPTION	PAVED MI	UN-PAVED MI	LANES	FC
010	10030364	Moore Valley Public North Road	2.59	From West Mail Road (Rte 013) to Martin Lake Parking (Rte 905)	-	2.59	1	1
011	10030364	Moore Valley Public South Road	2.44	From West Mail Road (Rte 013) to Middle Harrison Lake Parking (Rte 908)	-	2.44	1	1
012	10030363	Island Lake Loop Road	5.53	From Information Kiosk Parking (Rte 913) to Roundup Lake Parking 2 (Rte 918)	-	5.53	1	1
013	10030366	West Mail Road	5.10	From Road 181 to west refuge boundary	-	5.10	2	1
100	10030363	Crane Lake Road	2.05	From Island Lake Loop Road (Rte 012) to end of route	-	2.05	1	2
101	10043384	Island Lake Spur Road	0.14	From Road 181 to Island Lake Fishing Access Parking (Rte 912)	-	0.14	1	2
102	-	Vistor Center Access Road	0.18	From Road 181 to Main HQ Service Road (Rte 300)	-	0.18	1	2
300	10030365	Main HQ Service Road	0.44	From Visitor Center Access Road (Rte 102) to end of route	-	0.44	1	4
301	10030365	West Equipment Storage Road	0.09	From Main HQ Service Road (Rte 301) to equipment storage area	-	0.09	1	4
302	10030365	South Tower Road	0.52	From Road 181 to south tower	-	0.52	1	4
303	10030365	Radio Tower Road	0.32	From Road 181 to radio tower	-	0.32	1	4
400	10030365	Lost Lake Road	2.11	From Lost Lake Parking (Rte 909) to end of route near pond	-	2.11	1	5
401	10030365	Crane Loop Road	1.25	From Island Lake Loop Road (Rte 012) to Crane Lake Road (Rte 100)	-	1.25	1	5
402	10030365	Shafer Lake Road	1.25	From Island Lake Loop Road (Rte 012) to end of route at gate	-	1.25	1	5
403	10030365	Hackberry Road	1.52	From Road 181 to south refuge boundary	-	1.52	1	5
404	10030365	West Jones Road	3.75	From refuge boundary to North Hackberry Road (Rte 405)	-	3.75	1	5
405	10030365	North Hackberry Road	1.62	From West Jones Road (Rte 404) to Road 181	-	1.62	1	5
406	10030365	West Island Road	0.47	From Island Lake Loop Road (Rte 012) to end of route	-	0.47	1	5
407	10030365	Roundup Road	0.36	From Road 181 to end of distinguishable route at gate	-	0.36	1	5
408	10030365	North Tree Claim Road	0.77	From West Mail Road (Rte 013) to end of distinguishable route at gate	-	0.77	1	5
409	10030365	West Smith Road	1.45	From West Mail Road (Rte 013) to Martin Lake Parking (Rte 905)	-	1.45	1	5
411	10030365	Perrin Lake Road	0.33	From Moore Valley Public South Road (Rte 011) to same	-	0.33	1	5
412	10030365	Harrison Lake Road	0.28	From Upper Harrison Lake Parking (Rte 907) to end of route	-	0.28	1	5
413	10030365	South Boyd Road	0.31	From Moore Valley Public South Road (Rte 011) to wet area	-	0.31	1	5
414	10030365	Boyd Road	1.46	From Moore Valley Public South Road (Rte 011) to South Tree Claim Road (Rte 415)	-	1.46	1	5
415	10030365	South Tree Claim Road	1.01	From Barret Road (Rte 418) to West Mail Road (Rte 013)	-	1.01	1	5
416	10030365	Roberts Road	2.90	From Road 181 to West Jones Road (Rte 404)	-	2.90	1	5
417	10030365	School Section Road	3.16	From Roberts Road (Rte 416) to Barrett Road (Rte 418)	-	3.16	1	5

Crescent Lake NWR - 64510 - ROUTE IDENTIFICATION LIST (NUMERIC)

Shading Color Key:

White = Paved Routes
Yellow = Unpaved Routes

RTE #	Asset Number	ROUTE NAME	RTE MI	ROUTE DESCRIPTION	PAVED MI	UN-PAVED MI	LANES	FC
418	10030365	Barret Road	2.16	From South Tree Claim Road (Rte 415) to Roberts Road (Rte 416)	-	2.16	1	5

Crescent Lake NWR - 64510 - ROUTE IDENTIFICATION LIST (PARKING)

Shading Color Key:

Green = Unpaved Parking Lots

Blue = Paved Parking Lots

RTE #	ASSET NUMBER	ROUTE NAME	RTE SQFT	ROUTE DESCRIPTION	PAVED SQFT	UN-PAVED SQFT
800	10030365	Service Parking 1	3955		-	3955
801	10030365	Service Parking 2	2558		-	2558
802	10030365	Service Parking 3	1459		-	1459
803	10030365	Service Parking 4	5067		-	5067
804	10030365	Service Parking 5	1241		-	1241
805	10030365	Service Parking 6	1161		-	1161
806	10030365	Service Parking 7	2261		-	2261
807	10030365	Employee Quarters Parking	4678		-	4678
900	10030374	Rackett Road Parking	8614		-	8614
901	10030375	Headquarters Parking	3962		-	3962
902	10030374	West Mail Road Kiosk Parking	1243		-	1243
903	10030374	Southwest Smith Lake Parking	2282		-	2282
904	10030374	Southeast Smith Lake Parking	858		-	858
905	10030374	Martin Lake Parking	2583		-	2583
906	10030374	Perrin Lake Parking	3652		-	3652
907	10030374	Upper Harrison Lake Parking	2137		-	2137
908	10030374	Middle Harrison Lake Parking	2628		-	2628
909	10030374	Lost Lake Parking	4403		-	4403
910	10030374	Goose Lake Parking	1041		-	1041
911	10030376	Mallard Arm Wetlands Overlook Parking	627		-	627
912	10030377	Island Lake Fishing Access Parking	6089		-	6089
913	10030378	Information Kiosk Parking	3317		-	3317
914	10030374	Island Lake Handicap Access Parking	5279		-	5279
915	10030374	Island Lake South Parking	3291		-	3291
916	10030374	Island Lake East Parking	2854		-	2854
917	10030374	Roundup Lake Parking 1	3825		-	3825
918	10030374	Roundup Lake Parking 2	640		-	640
919		Wildlife Trailhead Parking	1608		-	1608

CHANGES TO THE FISH AND WILDLIFE SERVICE ROAD INVENTORY REPORT

Crescent Lake NWR - 64510

Routes added to previous inventory:

	Rte #	Rte Name	
1.	102	Visitor Center Access Road	Rte Desc:
			Reason for Addition: Missed during previous inventory
2.			Rte Desc:
			Reason for Addition:
3.			Rte Desc:
			Reason for Addition:

Routes removed from previous inventory:

No routes removed from previous inventory.

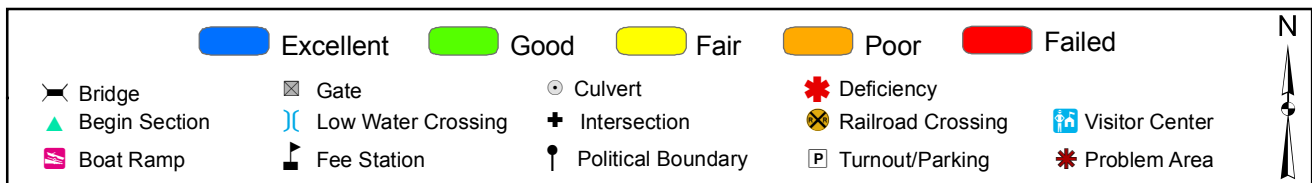
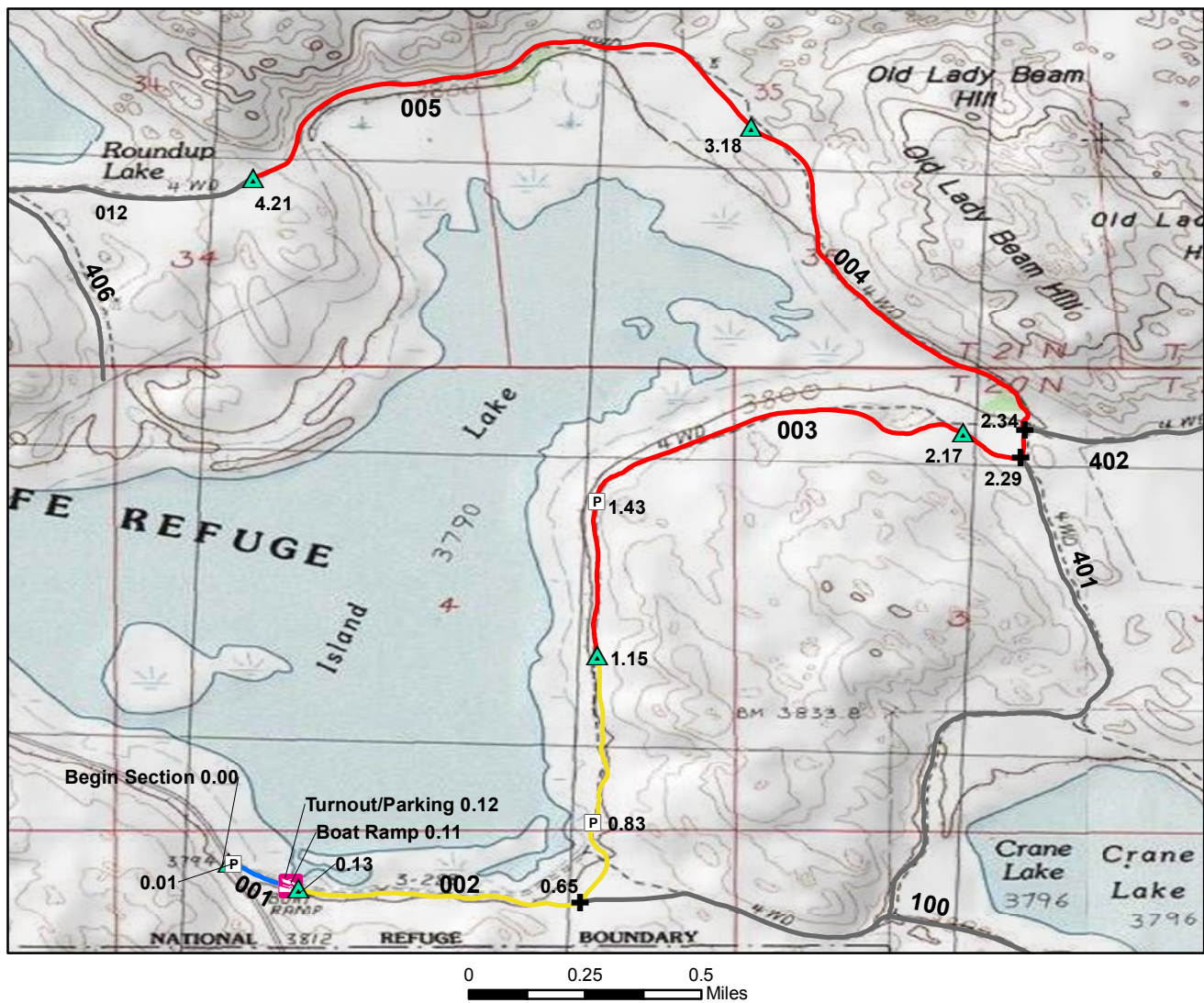
	Rte #	Rte Name	
1.			Rte Desc:
			Reason for Removal:
2.			Rte Desc:
			Reason for Removal:
3.			Rte Desc:
			Reason for Removal:

Routes modified from previous inventory:

No routes modified from previous inventory.

	Rte #	Rte Name	
1.			Rte Desc:
			Modification:
2.			Rte Desc:
			Modification:
3.			Rte Desc:
			Modification:

Comments:

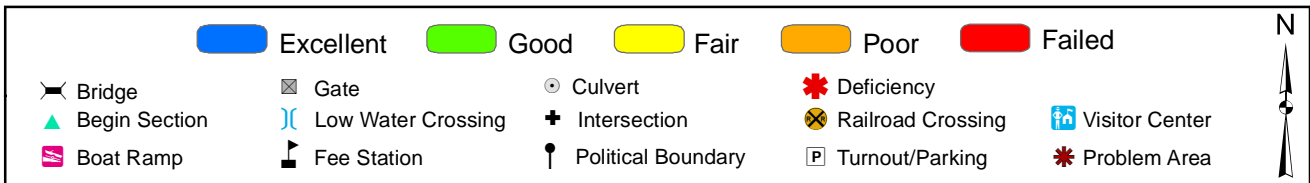
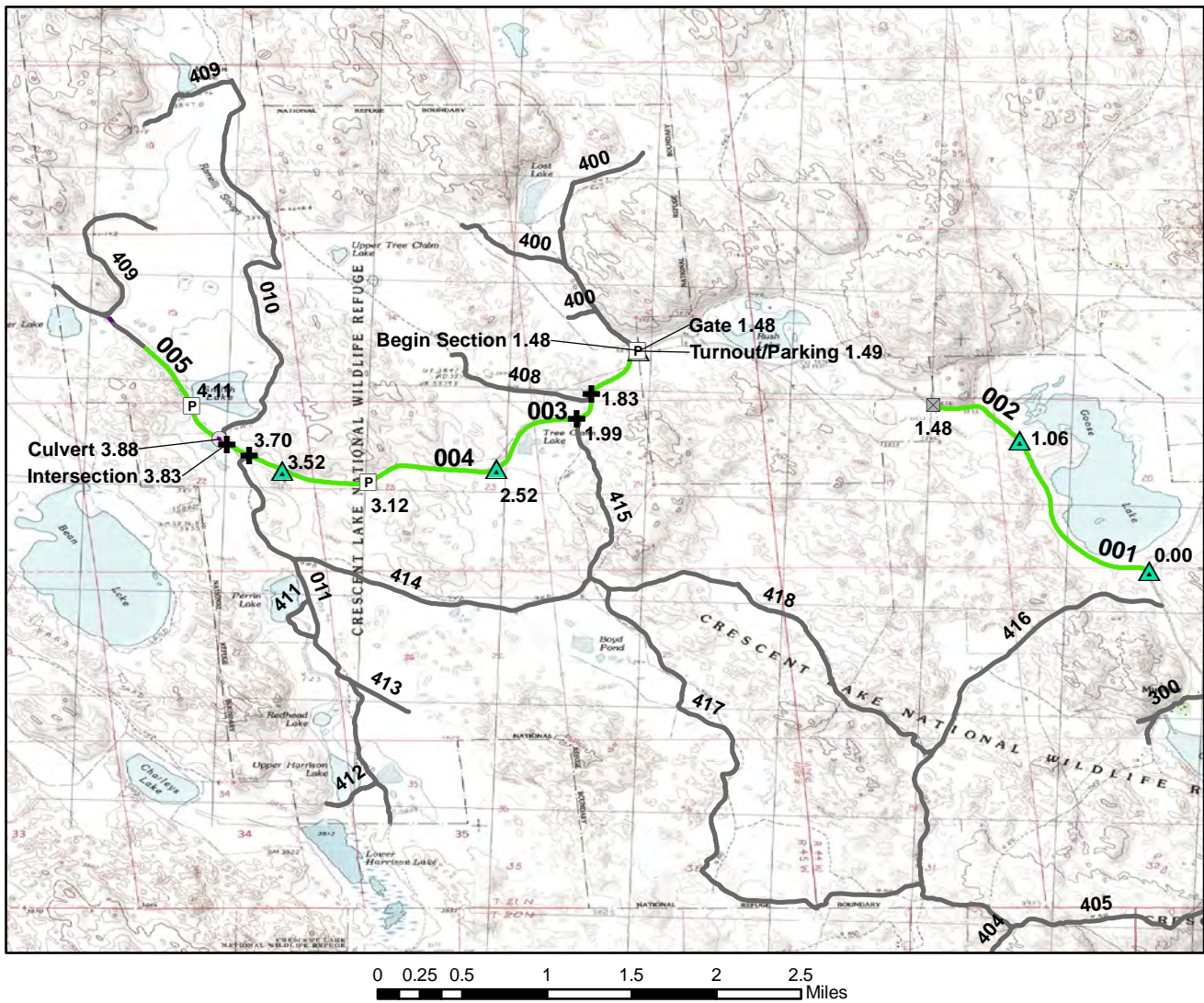


ROUTE: 012 Island Lake Loop Road TOTAL LENGTH: 5.53 Miles

ASSET: 10030363

RTE DESCRIPTION: From Information Kiosk Parking (Rte 913) to Roundup Lake Parking 2 (Rte 918)

Section Number	001	002	003	004	005
Section Length (miles)	0.13	1.02	1.02	1.02	1.02
Inspection Date	5/13/2008	8/1/2003	8/1/2003	8/1/2003	8/1/2003
Section Information					
Surface Type	Gravel	Native	Native	Native	Native
Number of Lanes	1	1	1	1	1
Roadway Width (feet)	10	9	9	9	9
Roadway Condition Information					
Condition	Excellent	Fair	Failed	Failed	Failed
Remaining Service Life (years)	9	4	0	0	0
Cost Estimate	\$0	\$2200	\$127600	\$127500	\$128000
CRV	\$89100	\$371100	\$370500	\$370300	\$371800

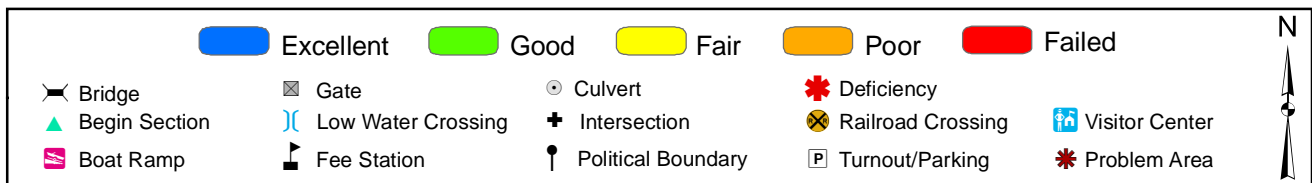
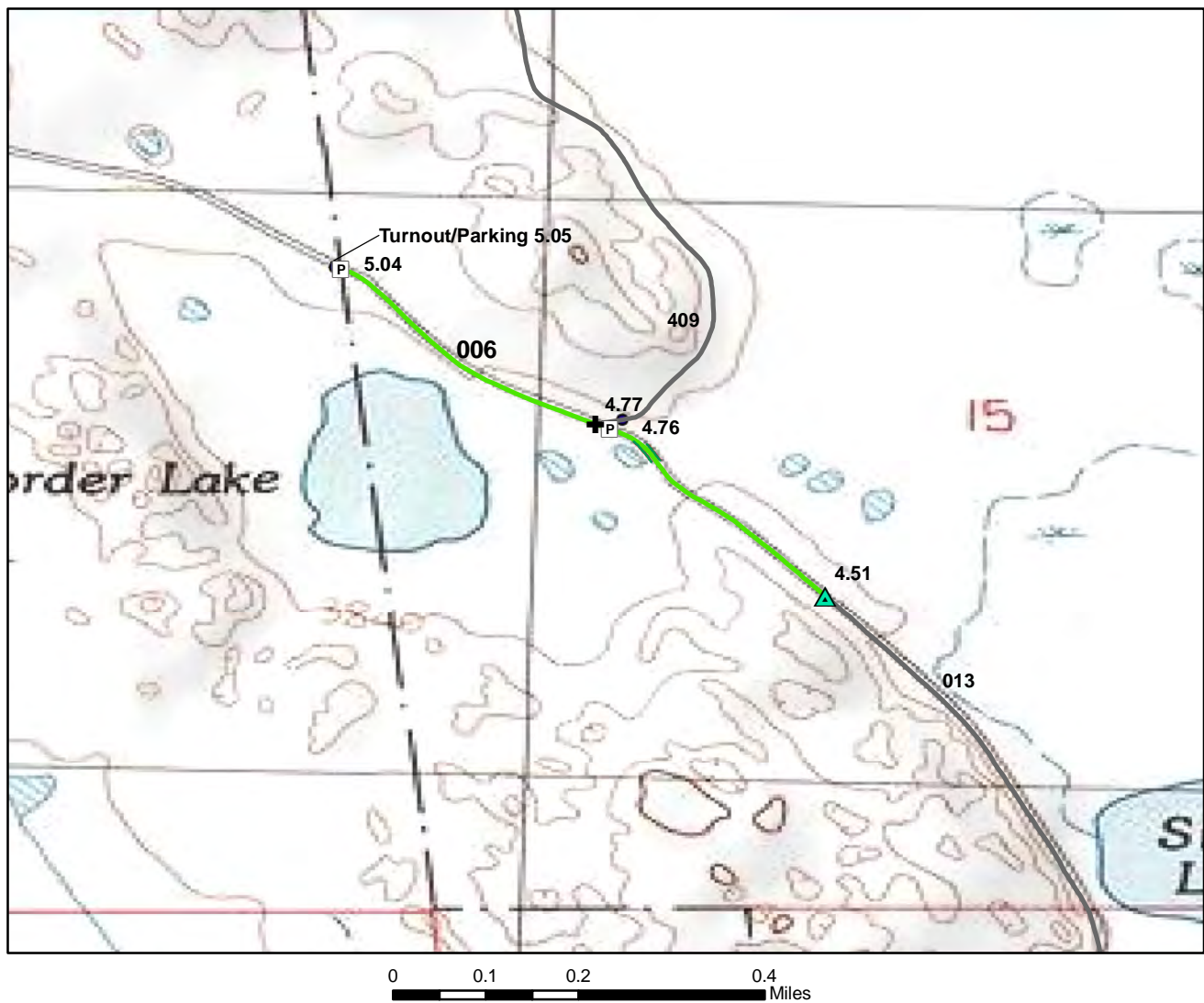


ROUTE: 013 West Mail Road TOTAL LENGTH: 5.10 Miles

ASSET: 10030366

RTE DESCRIPTION: From Road 181 to west refuge boundary

Section Number	001	002	003	004	005
Section Length (miles)	1.06	0.47	1.04	1.00	0.99
Inspection Date	5/13/2008	5/13/2008	5/13/2008	5/13/2008	5/13/2008
Section Information					
Surface Type	Gravel	Gravel	Gravel	Gravel	Gravel
Number of Lanes	2	2	2	2	2
Roadway Width (feet)	20	20	20	20	20
Roadway Condition Information					
Condition	Good	Good	Good	Good	Good
Remaining Service Life (years)	7	7	7	7	7
Cost Estimate	\$1700	\$800	\$1700	\$1700	\$1600
CRV	\$745300	\$332500	\$731000	\$706500	\$695300



ROUTE: 013 West Mail Road TOTAL LENGTH: 5.10 Miles

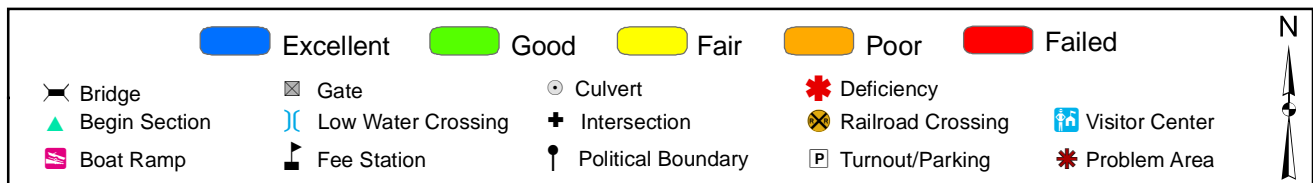
ASSET: 10030366

RTE DESCRIPTION: From Road 181 to west refuge boundary

Section Number	006				
Section Length (miles)	0.54				
Inspection Date	5/13/2008				
Section Information					
Surface Type	Gravel				
Number of Lanes	2				
Roadway Width (feet)	20				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$900				
CRV	\$378800				



0 0.1 0.2 Miles



ROUTE: 101 Island Lake Spur Road

TOTAL LENGTH: 0.14 Miles

ASSET: 10043384

RTE DESCRIPTION: From Road 181 to Island Lake Fishing Access Parking (Rte 912)

Section Number	001				
Section Length (miles)	0.14				
Inspection Date	5/13/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	10				
Roadway Condition Information					
Condition	Excellent				
Remaining Service Life (years)	10				
Cost Estimate	\$0				
CRV	\$49500				

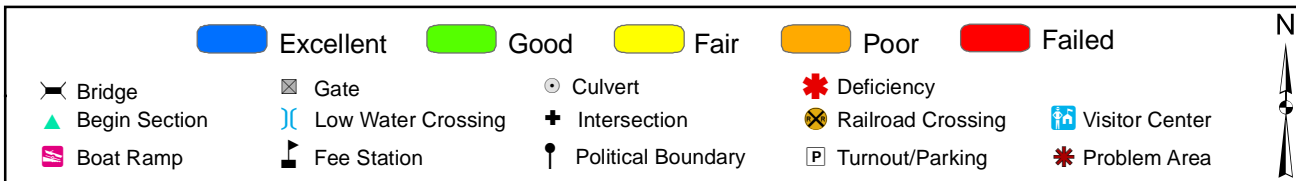


ROUTE: 102 Vistor Center Access Road TOTAL LENGTH: 0.18 Miles

ASSET:

RTE DESCRIPTION: From Road 181 to Main HQ Service Road (Rte 300)

Section Number	001	002			
Section Length (miles)	0.14	0.03			
Inspection Date	5/13/2008	5/13/2008			
Section Information					
Surface Type	Gravel	Gravel			
Number of Lanes	1	1			
Roadway Width (feet)	14	14			
Roadway Condition Information					
Condition	Excellent	Excellent			
Remaining Service Life (years)	9	10			
Cost Estimate	\$0	\$0			
CRV	\$101100	\$23000			

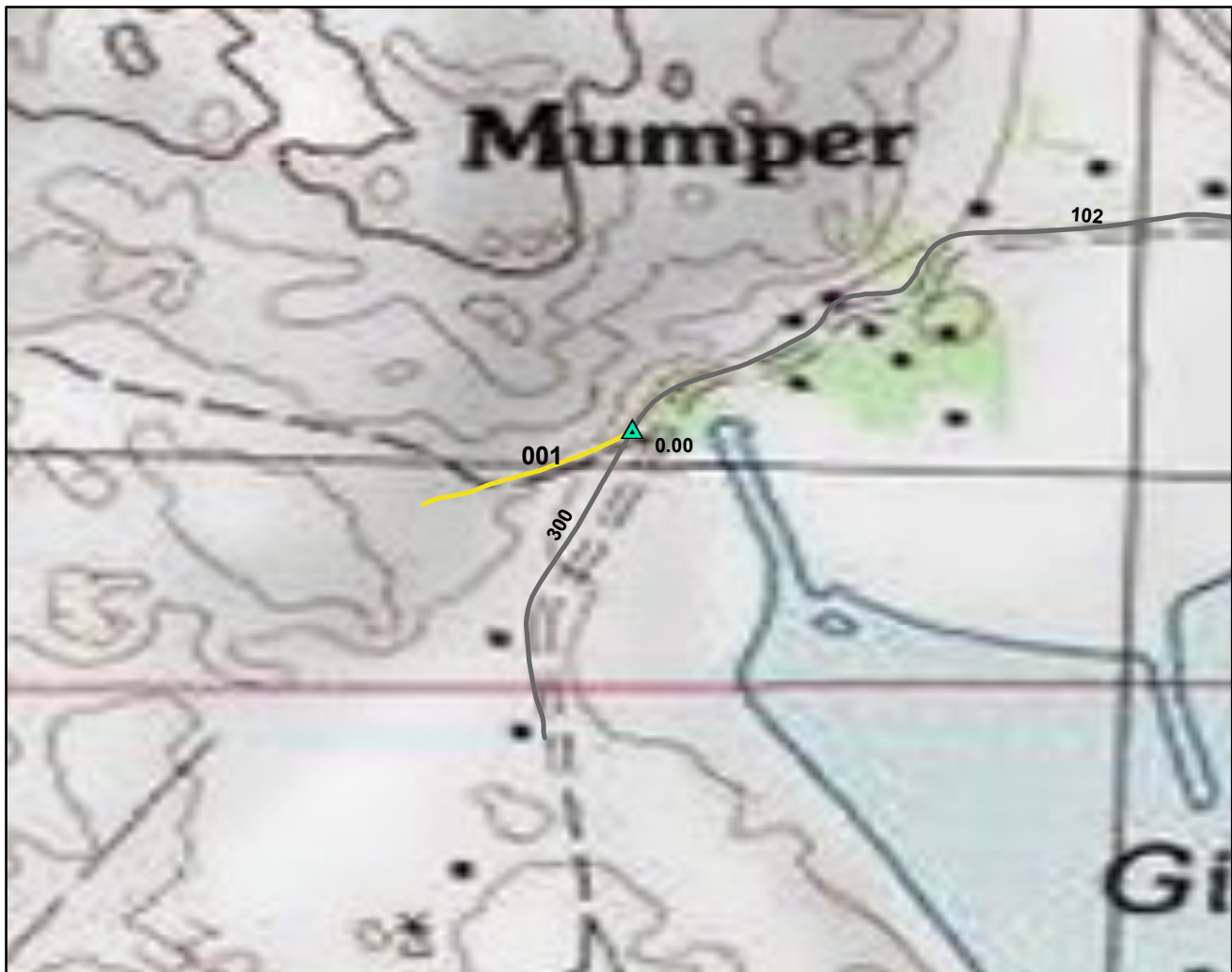


ROUTE: 300 Main HQ Service Road TOTAL LENGTH: 0.44 Miles

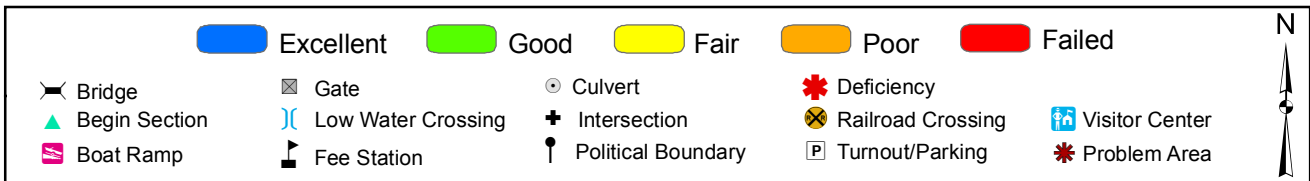
ASSET: 10030365

RTE DESCRIPTION: From Visitor Center Access Road (Rte 102) to end of route

Section Number	001				
Section Length (miles)	0.44				
Inspection Date	5/13/2008				
Section Information					
Surface Type	Gravel				
Number of Lanes	1				
Roadway Width (feet)	14				
Roadway Condition Information					
Condition	Excellent				
Remaining Service Life (years)	9				
Cost Estimate	\$0				
CRV	\$307100				



0 0.1 Miles

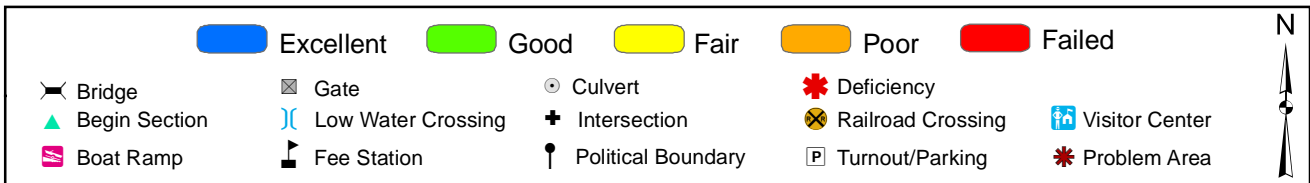
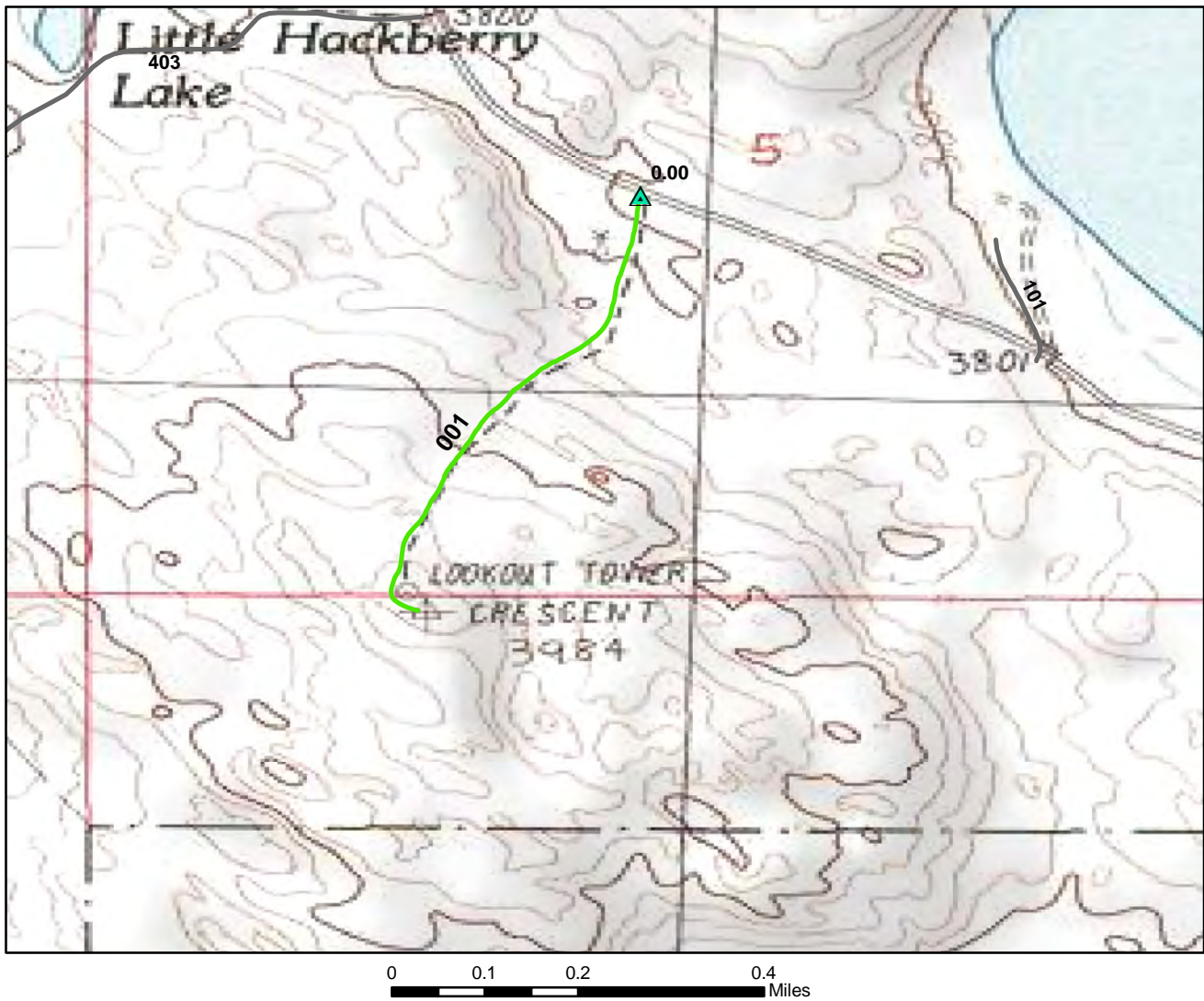


ROUTE: 301 West Equipment Storage Road TOTAL LENGTH: 0.09 Miles

ASSET: 10030365

RTE DESCRIPTION: From Main HQ Service Road (Rte 301) to equipment storage area

Section Number	001				
Section Length (miles)	0.09				
Inspection Date	5/13/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	10				
Roadway Condition Information					
Condition	Fair				
Remaining Service Life (years)	3				
Cost Estimate	\$200				
CRV	\$33500				



ROUTE: 302 South Tower Road TOTAL LENGTH: 0.52 Miles

ASSET: 10030365

RTE DESCRIPTION: From Road 181 to south tower

Section Number	001				
Section Length (miles)	0.52				
Inspection Date	5/14/2008				
Section Information					
Surface Type	Primitive				
Number of Lanes	1				
Roadway Width (feet)	10				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	5				
Cost Estimate	\$200				
CRV	\$0				



0 0.1 0.2 Miles

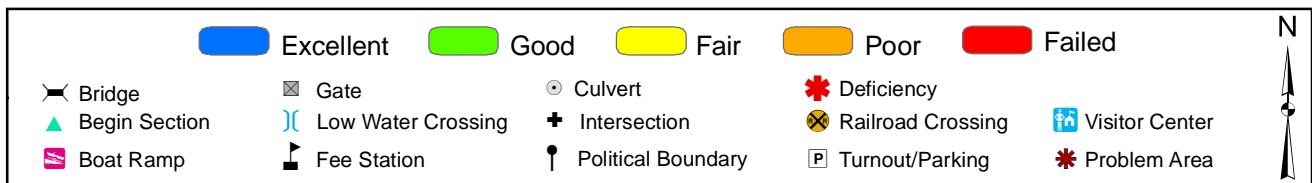
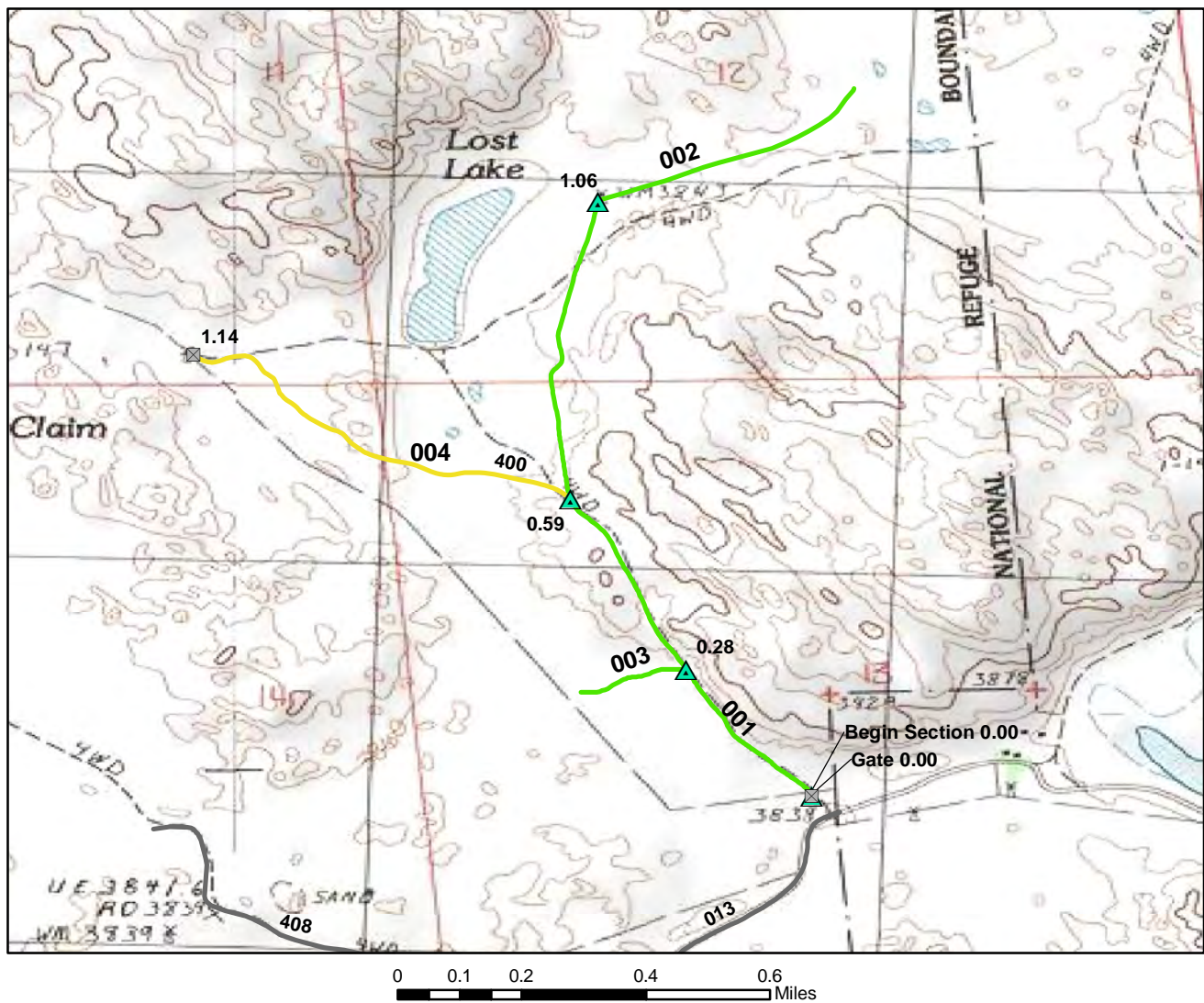
	Excellent		Good		Fair		Poor		Failed	N
	Bridge		Gate		Culvert		Deficiency		Railroad Crossing	
	Begin Section		Low Water Crossing		Intersection		Visitor Center		Turnout/Parking	
	Boat Ramp		Fee Station		Political Boundary		Problem Area			

ROUTE: 303 Radio Tower Road TOTAL LENGTH: 0.32 Miles

ASSET: 10030365

RTE DESCRIPTION: From Road 181 to radio tower

Section Number	001				
Section Length (miles)	0.32				
Inspection Date	5/14/2008				
Section Information					
Surface Type	Primitive				
Number of Lanes	1				
Roadway Width (feet)	8				
Roadway Condition Information					
Condition	Fair				
Remaining Service Life (years)	3				
Cost Estimate	\$200				
CRV	\$0				

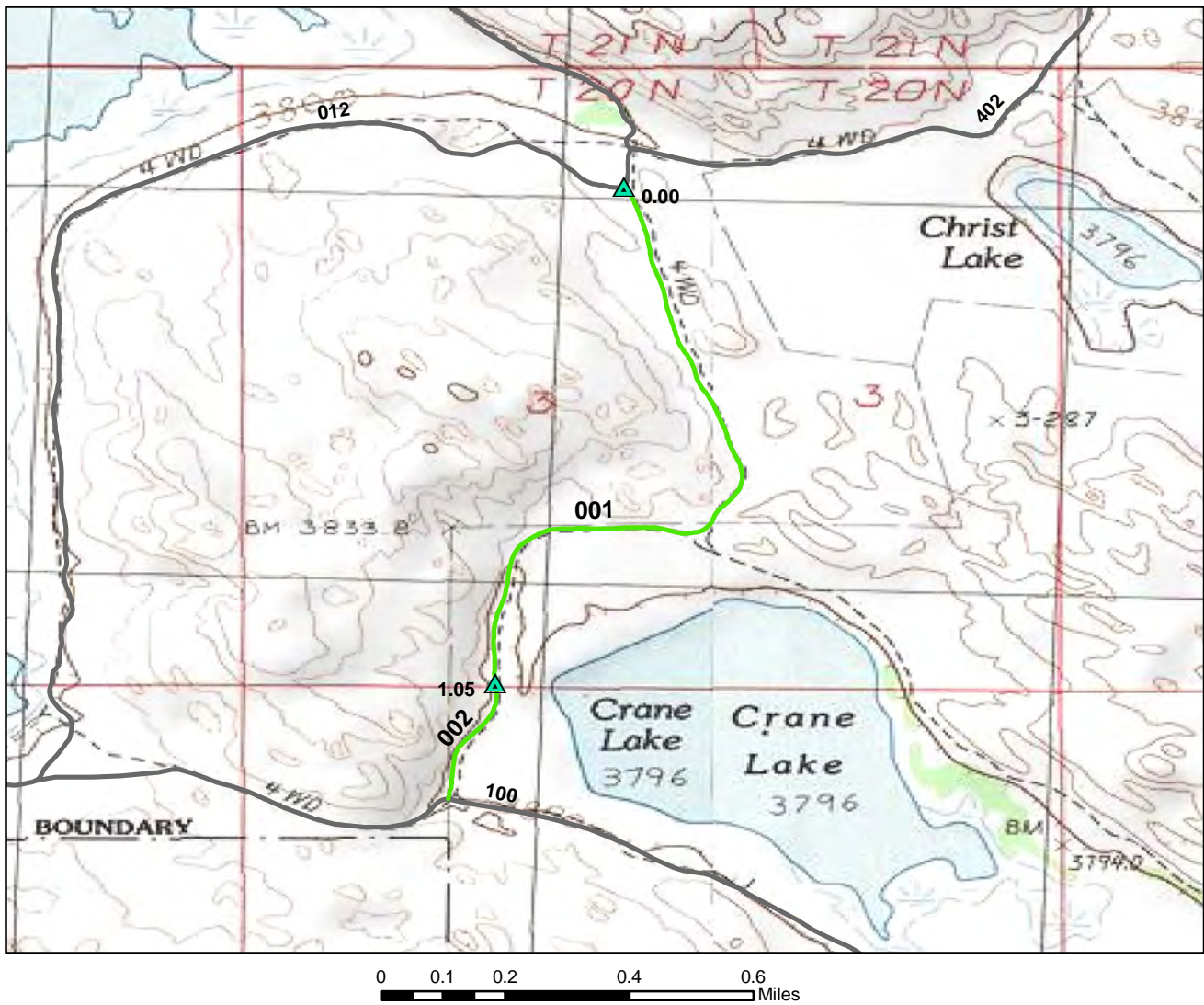


ROUTE: 400 Lost Lake Road TOTAL LENGTH: 2.11 Miles

ASSET: 10030365

RTE DESCRIPTION: From Lost Lake Parking (Rte 909) to end of route near pond

Section Number	001	002	003	004	
Section Length (miles)	1.06	0.37	0.14	0.55	
Inspection Date	5/14/2008	5/14/2008	5/14/2008	5/14/2008	
Section Information					
Surface Type	Primitive	Primitive	Primitive	Primitive	
Number of Lanes	1	1	1	1	
Roadway Width (feet)	8	8	8	8	
Roadway Condition Information					
Condition	Good	Good	Good	Fair	
Remaining Service Life (years)	5	5	5	3	
Cost Estimate	\$500	\$200	\$100	\$400	
CRV	\$0	\$0	\$0	\$0	

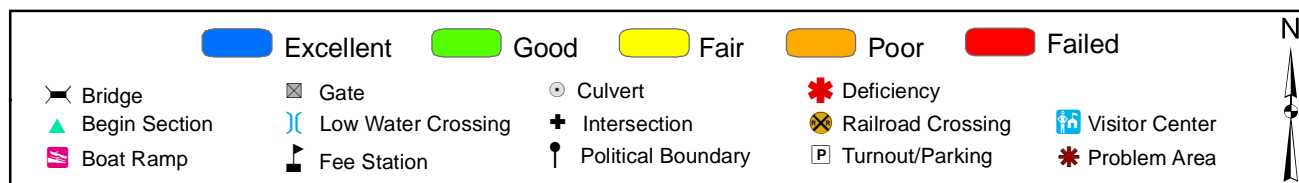
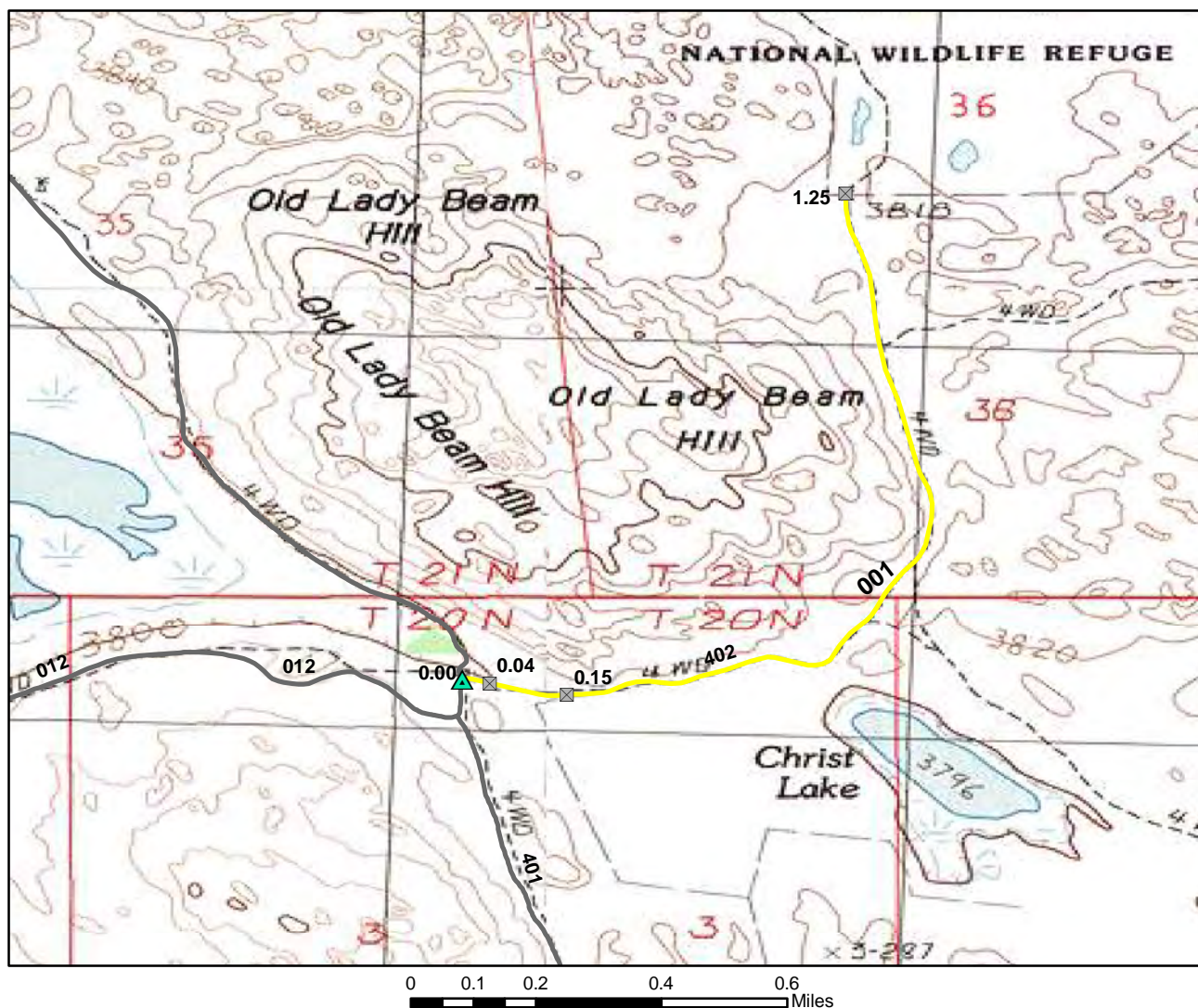


ROUTE: 401 Crane Loop Road TOTAL LENGTH: 1.25 Miles

ASSET: 10030365

RTE DESCRIPTION: From Island Lake Loop Road (Rte 012) to Crane Lake Road (Rte 100)

Section Number	001	002			
Section Length (miles)	1.05	0.20			
Inspection Date	5/14/2008	5/14/2008			
Section Information					
Surface Type	Primitive	Primitive			
Number of Lanes	1	1			
Roadway Width (feet)	8	8			
Roadway Condition Information					
Condition	Good	Good			
Remaining Service Life (years)	5	5			
Cost Estimate	\$500	\$100			
CRV	\$0	\$0			

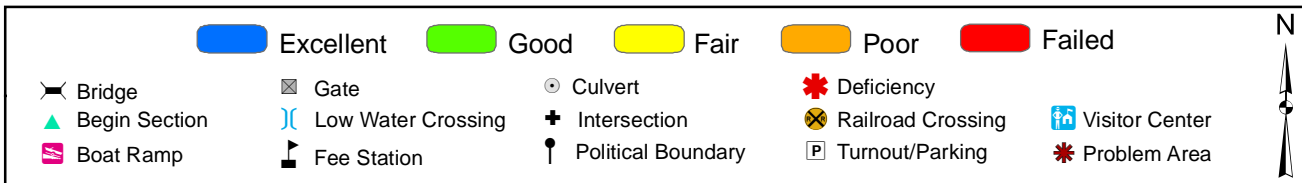
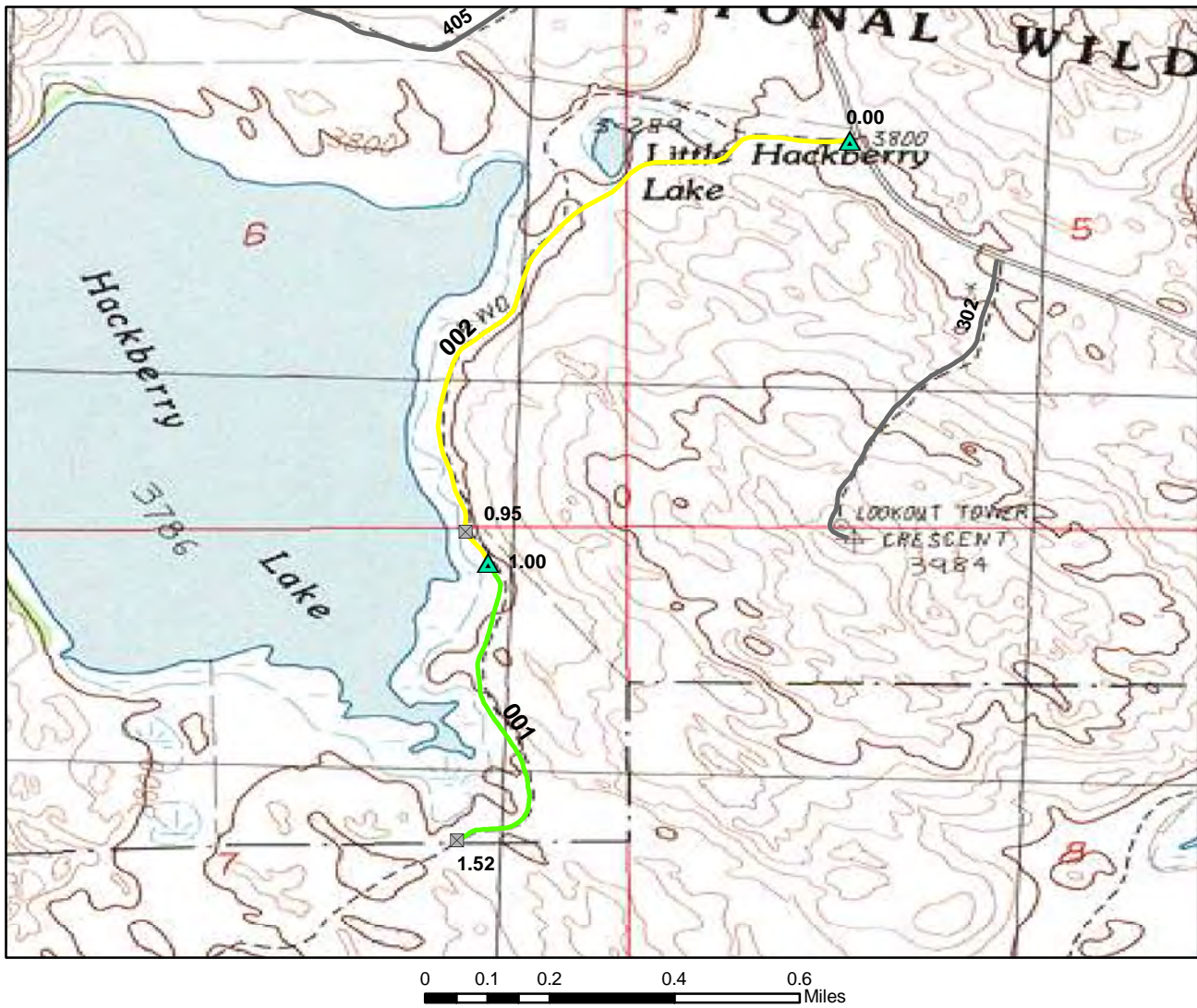


ROUTE: 402 Shafer Lake Road TOTAL LENGTH: 1.25 Miles

ASSET: 10030365

RTE DESCRIPTION: From Island Lake Loop Road (Rte 012) to end of route at gate

Section Number	001				
Section Length (miles)	1.25				
Inspection Date	5/14/2008				
Section Information					
Surface Type	Primitive				
Number of Lanes	1				
Roadway Width (feet)	8				
Roadway Condition Information					
Condition	Fair				
Remaining Service Life (years)	3				
Cost Estimate	\$900				
CRV	\$0				



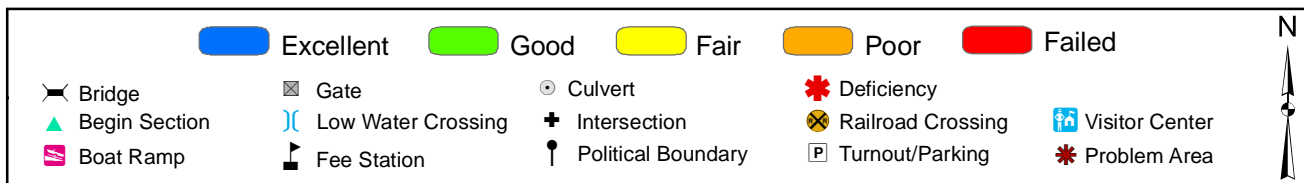
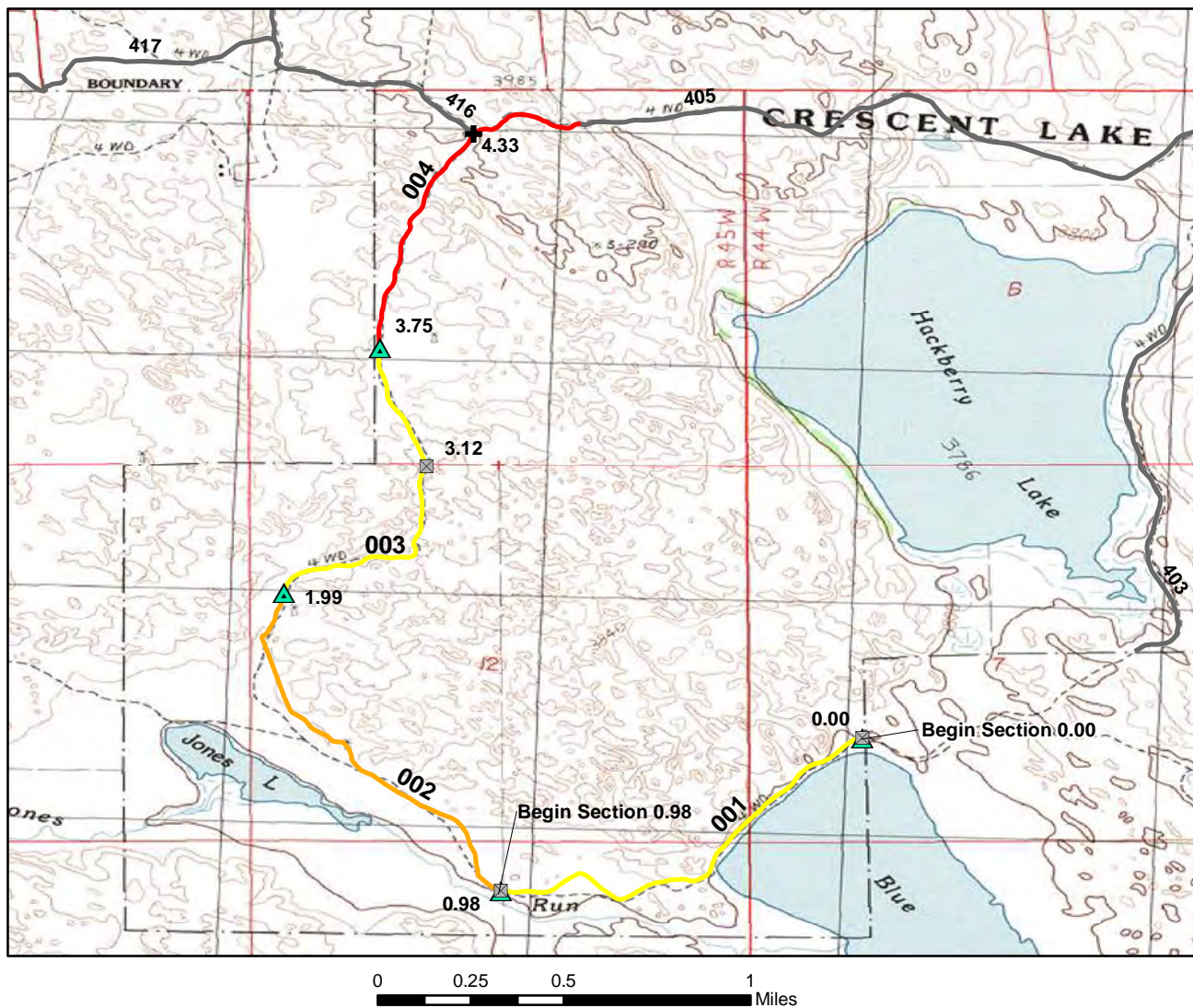
ROUTE: 403 Hackberry Road

TOTAL LENGTH: 1.52 Miles

ASSET: 10030365

RTE DESCRIPTION: From Road 181 to south refuge boundary

Section Number	001	002			
Section Length (miles)	1.00	0.52			
Inspection Date	5/14/2008	5/14/2008			
Section Information					
Surface Type	Primitive	Primitive			
Number of Lanes	1	1			
Roadway Width (feet)	10	8			
Roadway Condition Information					
Condition	Fair	Good			
Remaining Service Life (years)	4	5			
Cost Estimate	\$700	\$200			
CRV	\$0	\$0			



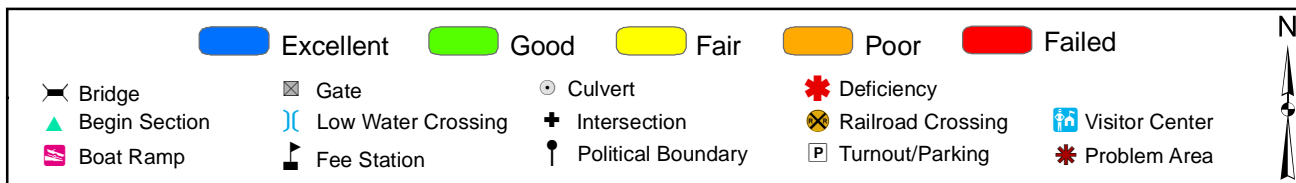
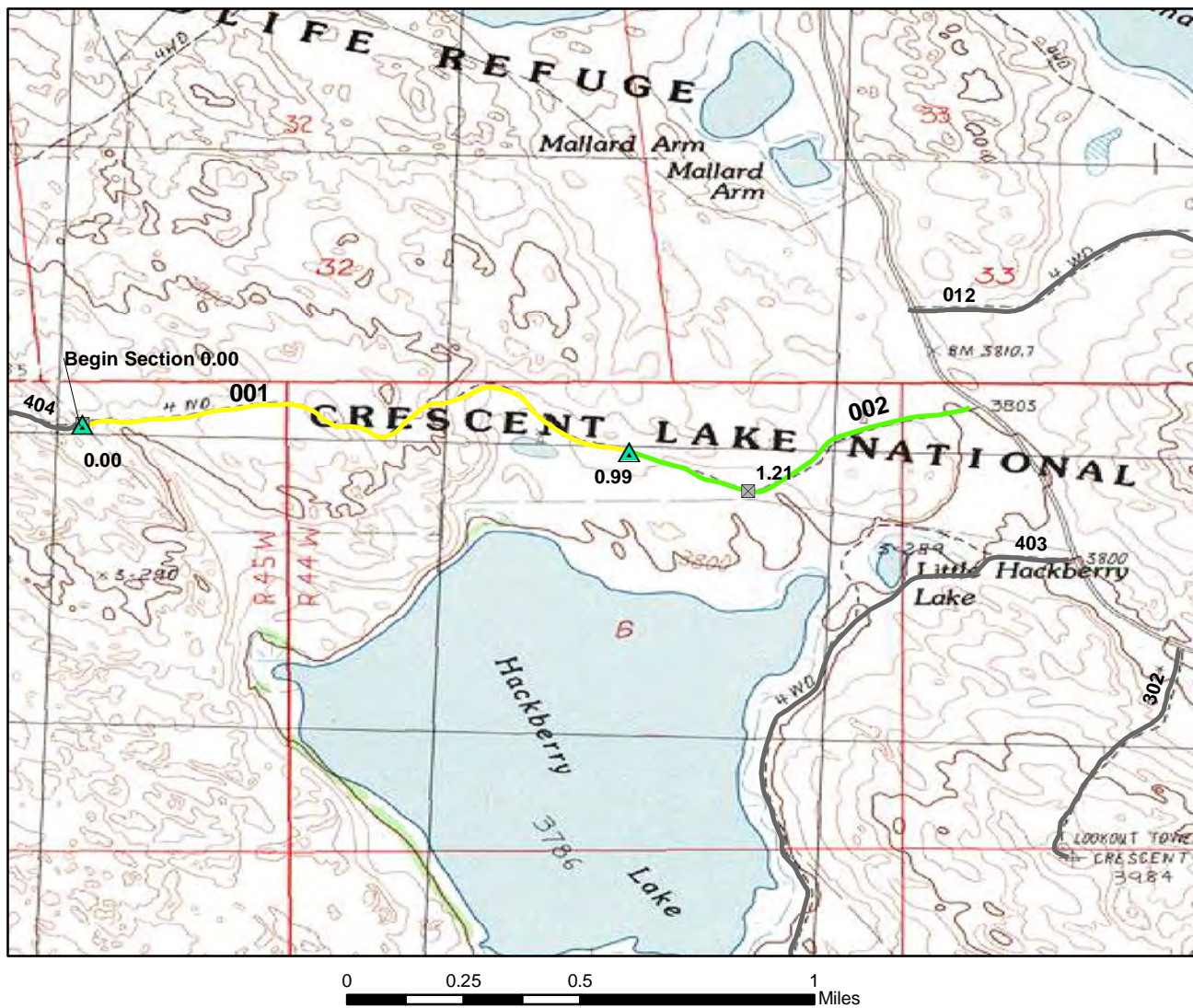
ROUTE: 404 West Jones Road

TOTAL LENGTH: 3.75 Miles

ASSET: 10030365

RTE DESCRIPTION: From refuge boundary to North Hackberry Road (Rte 405)

Section Number	001	002	003	004	
Section Length (miles)	0.98	1.01	0.89	0.87	
Inspection Date	5/14/2008	5/14/2008	5/14/2008	5/14/2008	
Section Information					
Surface Type	Primitive	Primitive	Primitive	Primitive	
Number of Lanes	1	1	1	1	
Roadway Width (feet)	8	8	8	8	
Roadway Condition Information					
Condition	Fair	Poor	Fair	Failed	
Remaining Service Life (years)	3	2	3	0	
Cost Estimate	\$700	\$1100	\$600	\$2400	
CRV	\$0	\$0	\$0	\$0	

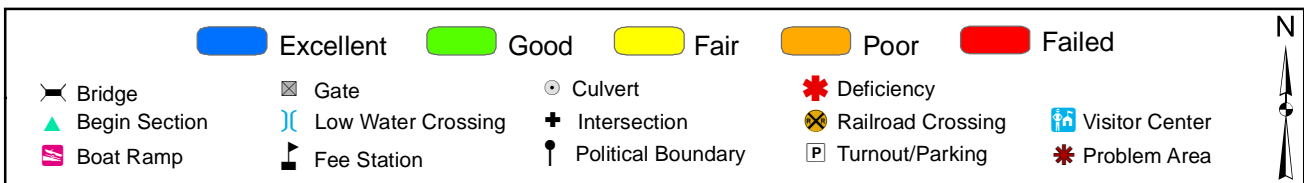
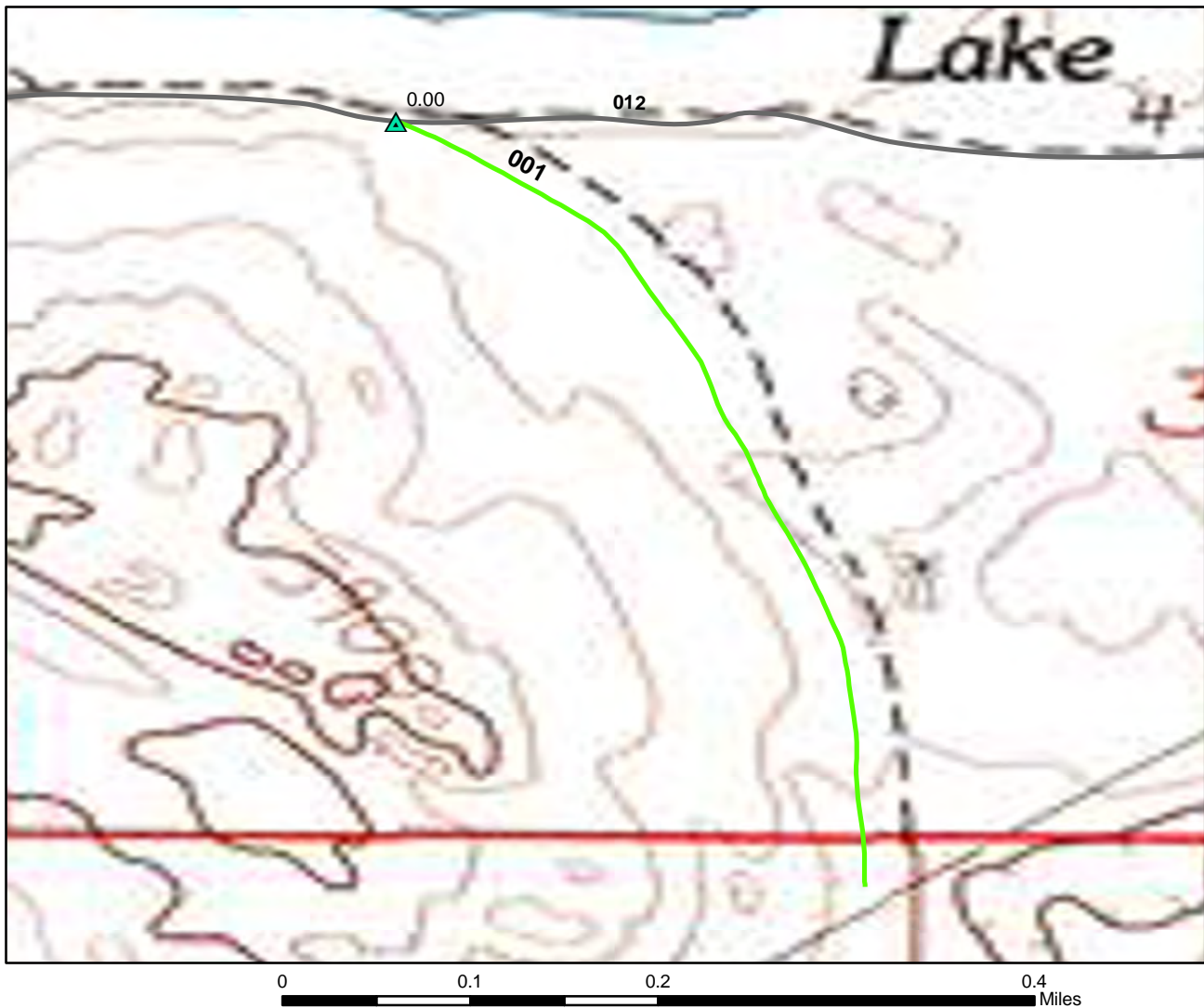


ROUTE: 405 North Hackberry Road TOTAL LENGTH: 1.62 Miles

ASSET: 10030365

RTE DESCRIPTION: From West Jones Road (Rte 404) to Road 181

Section Number	001	002			
Section Length (miles)	0.99	0.63			
Inspection Date	5/14/2008	5/14/2008			
Section Information					
Surface Type	Primitive	Primitive			
Number of Lanes	1	1			
Roadway Width (feet)	8	8			
Roadway Condition Information					
Condition	Fair	Good			
Remaining Service Life (years)	3	5			
Cost Estimate	\$700	\$300			
CRV	\$0	\$0			

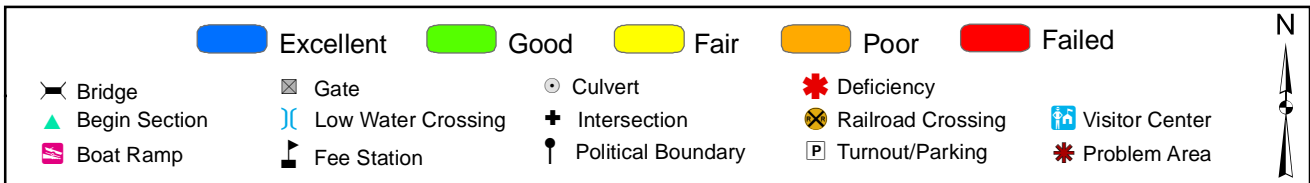


ROUTE: 406 West Island Road TOTAL LENGTH: 0.47 Miles

ASSET: 10030365

RTE DESCRIPTION: From Island Lake Loop Road (Rte 012) to end of route

Section Number	001				
Section Length (miles)	0.47				
Inspection Date	5/14/2008				
Section Information					
Surface Type	Primitive				
Number of Lanes	1				
Roadway Width (feet)	8				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	5				
Cost Estimate	\$200				
CRV	\$0				



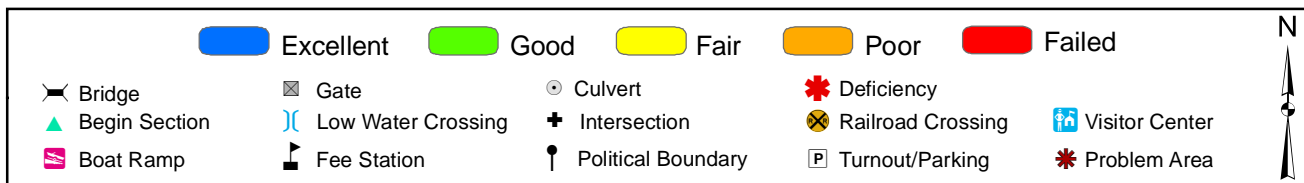
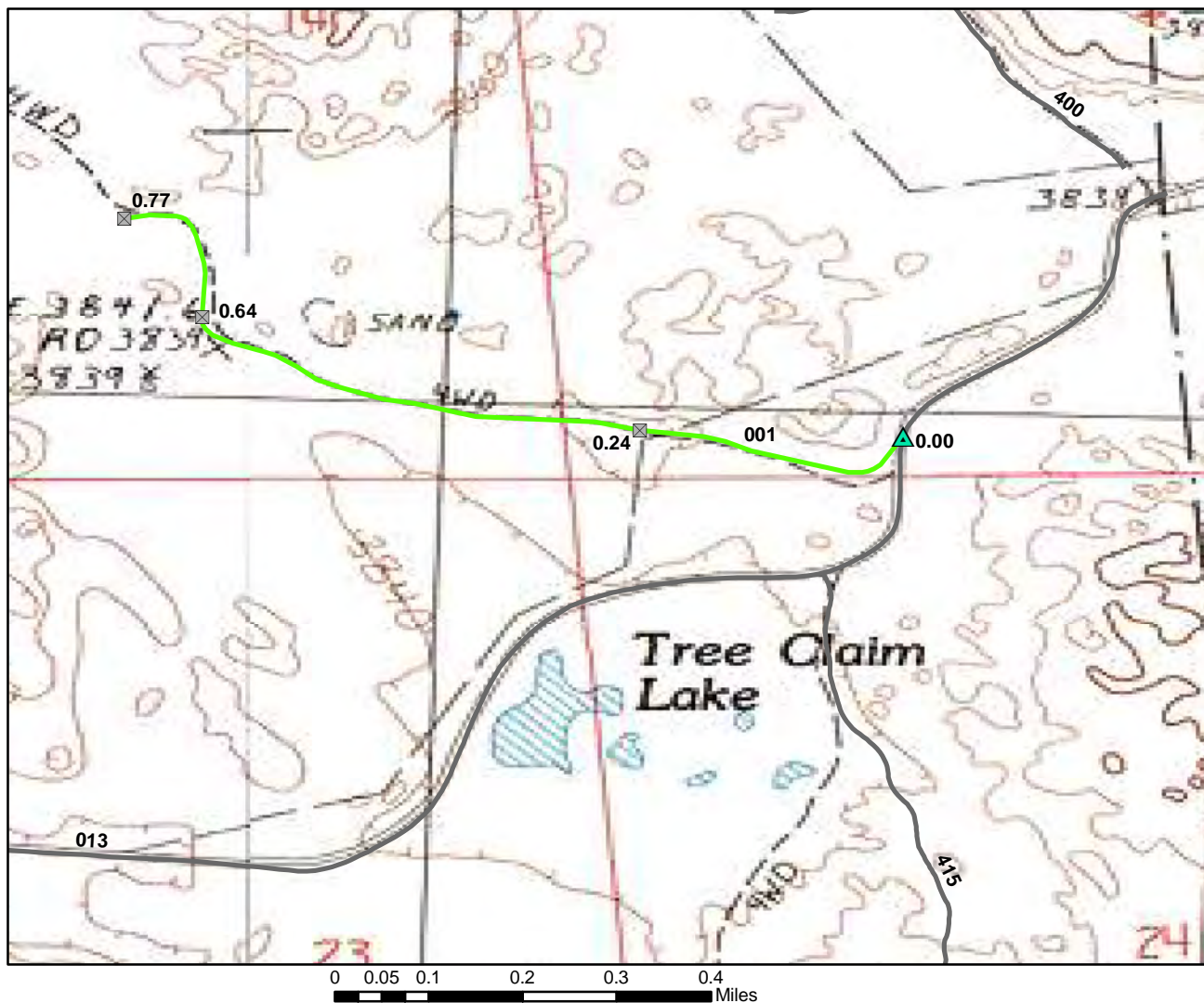
ROUTE: 407 Roundup Road

TOTAL LENGTH: 0.36 Miles

ASSET: 10030365

RTE DESCRIPTION: From Road 181 to end of distinguishable route at gate

Section Number	001	002	003		
Section Length (miles)	0.16	0.11	0.08		
Inspection Date	5/14/2008	5/14/2008	5/14/2008		
Section Information					
Surface Type	Gravel	Native	Native		
Number of Lanes	1	1	1		
Roadway Width (feet)	12	10	8		
Roadway Condition Information					
Condition	Excellent	Good	Good		
Remaining Service Life (years)	10	7	5		
Cost Estimate	\$0	\$200	\$100		
CRV	\$115100	\$41700	\$30200		

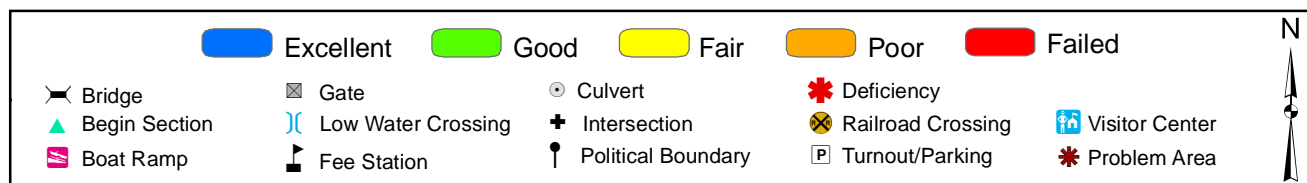
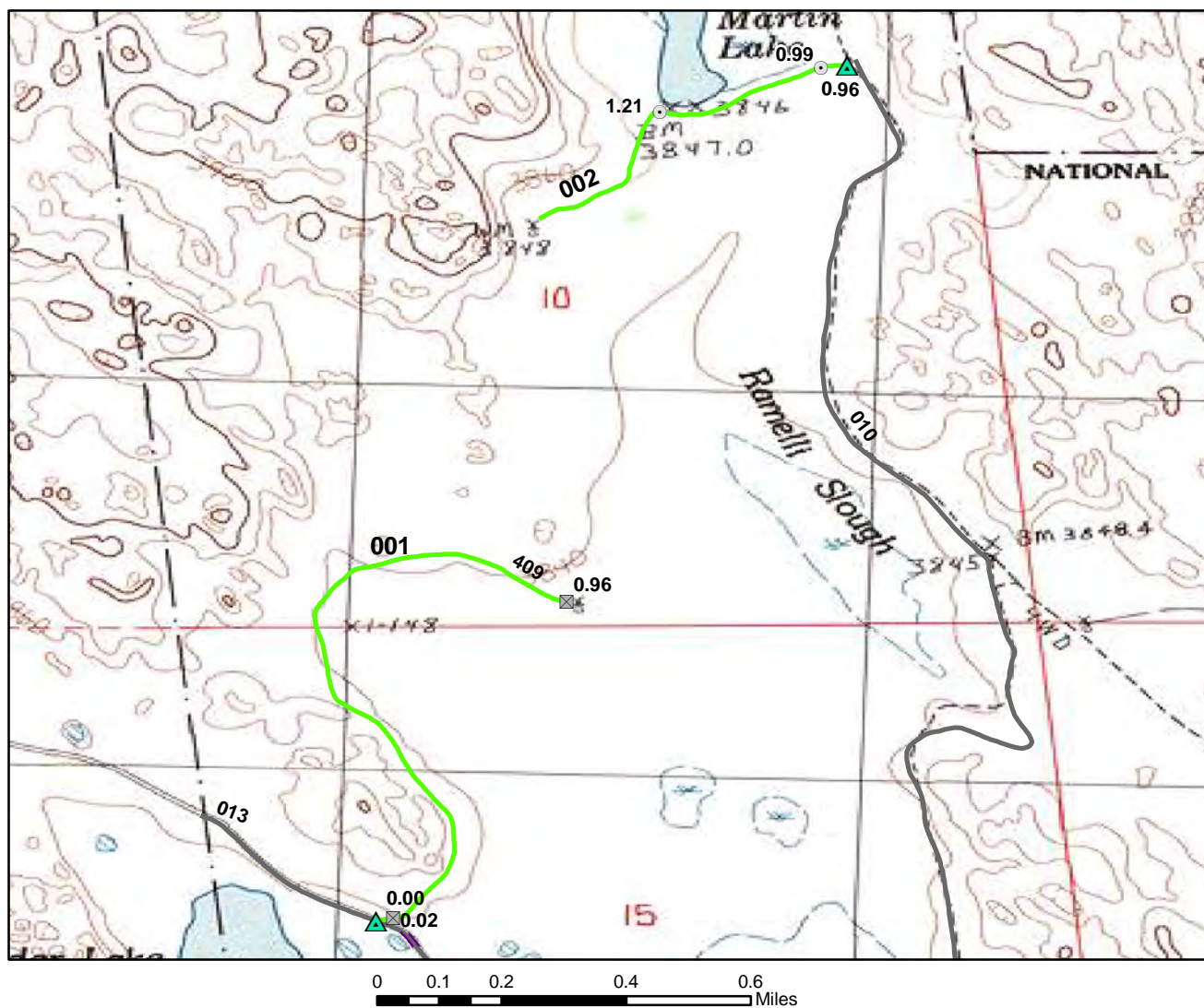


ROUTE: 408 North Tree Claim Road TOTAL LENGTH: 0.77 Miles

ASSET: 10030365

RTE DESCRIPTION: From West Mail Road (Rte 013) to end of distinguishable route at gate

Section Number	001				
Section Length (miles)	0.77				
Inspection Date	5/14/2008				
Section Information					
Surface Type	Primitive				
Number of Lanes	1				
Roadway Width (feet)	8				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	5				
Cost Estimate	\$300				
CRV	\$0				



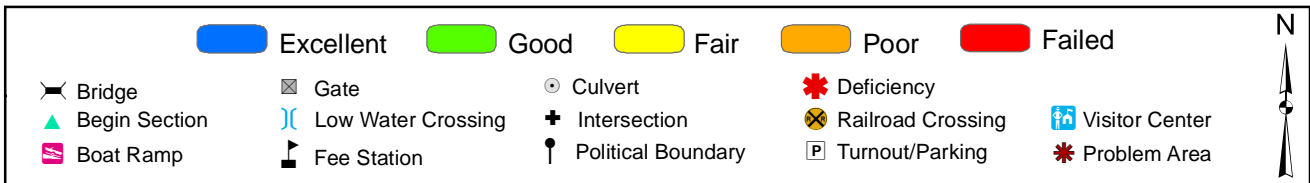
ROUTE: 409 West Smith Road

TOTAL LENGTH: 1.45 Miles

ASSET: 10030365

RTE DESCRIPTION: From West Mail Road (Rte 013) to Martin Lake Parking (Rte 905)

Section Number	001	002			
Section Length (miles)	0.96	0.49			
Inspection Date	5/14/2008	5/14/2008			
Section Information					
Surface Type	Primitive	Primitive			
Number of Lanes	1	1			
Roadway Width (feet)	8	8			
Roadway Condition Information					
Condition	Good	Good			
Remaining Service Life (years)	5	5			
Cost Estimate	\$400	\$200			
CRV	\$0	\$0			

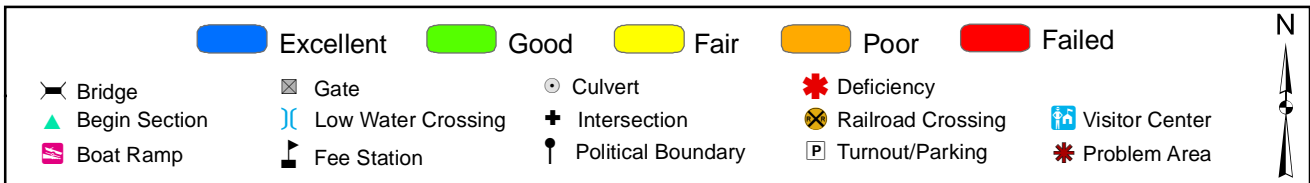


ROUTE: 411 Perrin Lake Road TOTAL LENGTH: 0.33 Miles

ASSET: 10030365

RTE DESCRIPTION: From Moore Valley Public South Road (Rte 011) to same

Section Number	001				
Section Length (miles)	0.33				
Inspection Date	5/14/2008				
Section Information					
Surface Type	Primitive				
Number of Lanes	1				
Roadway Width (feet)	8				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$100				
CRV	\$0				

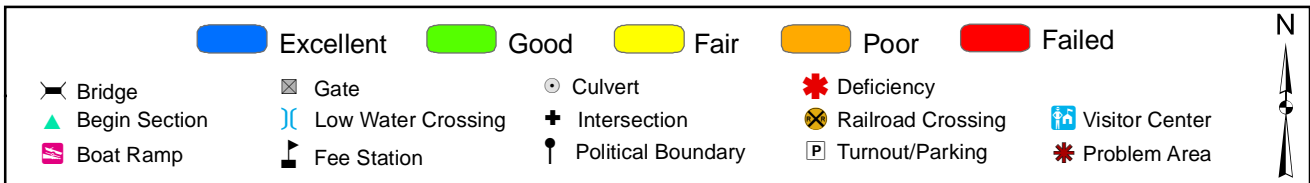
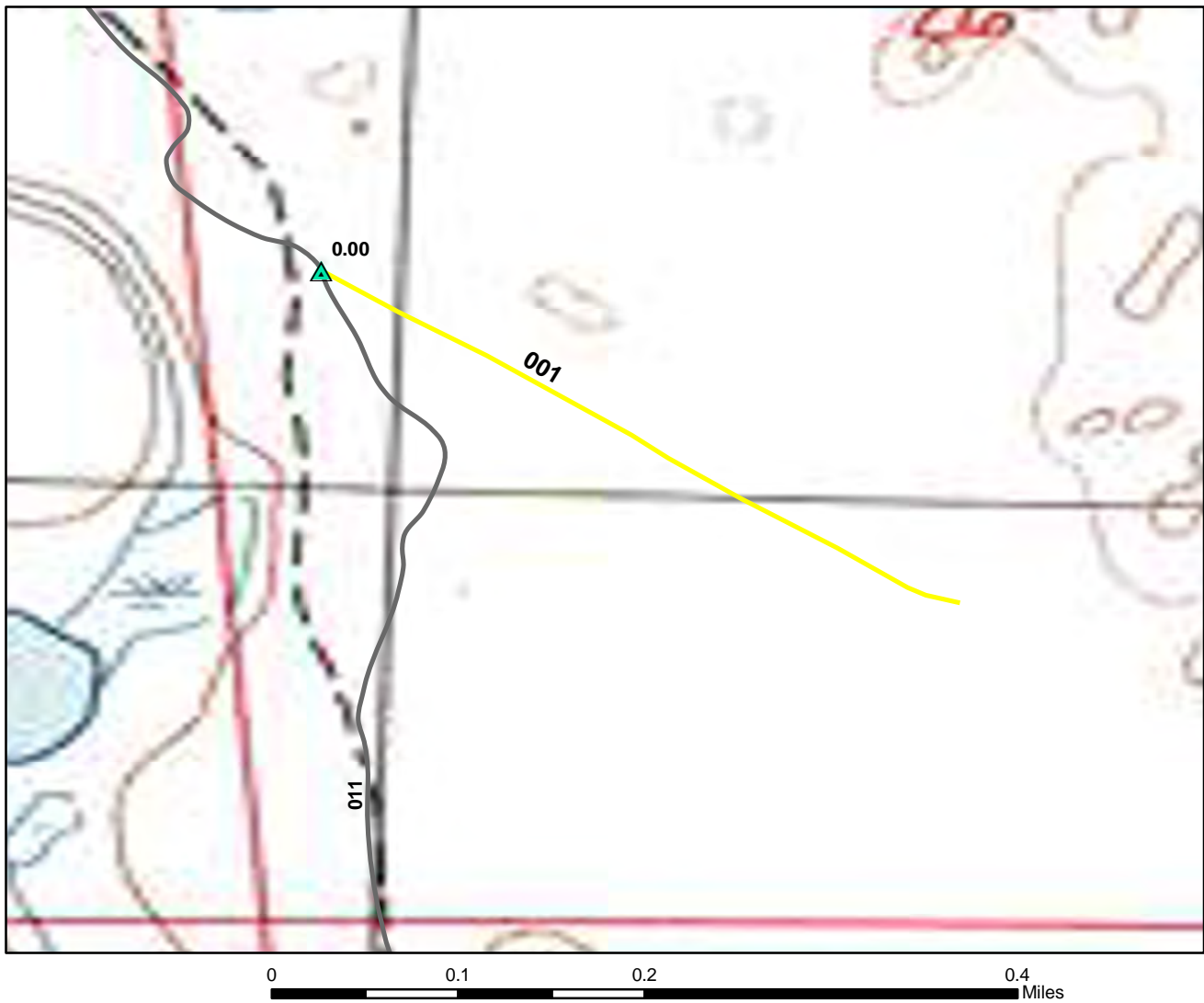


ROUTE: 412 Harrison Lake Road TOTAL LENGTH: 0.28 Miles

ASSET: 10030365

RTE DESCRIPTION: From Upper Harrison Lake Parking (Rte 907) to end of route

Section Number	001				
Section Length (miles)	0.28				
Inspection Date	5/14/2008				
Section Information					
Surface Type	Primitive				
Number of Lanes	1				
Roadway Width (feet)	8				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$100				
CRV	\$0				



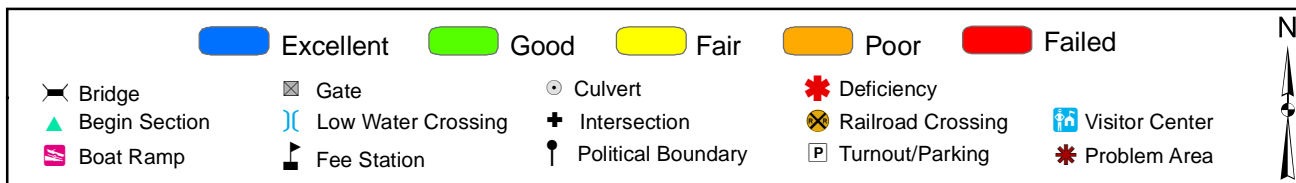
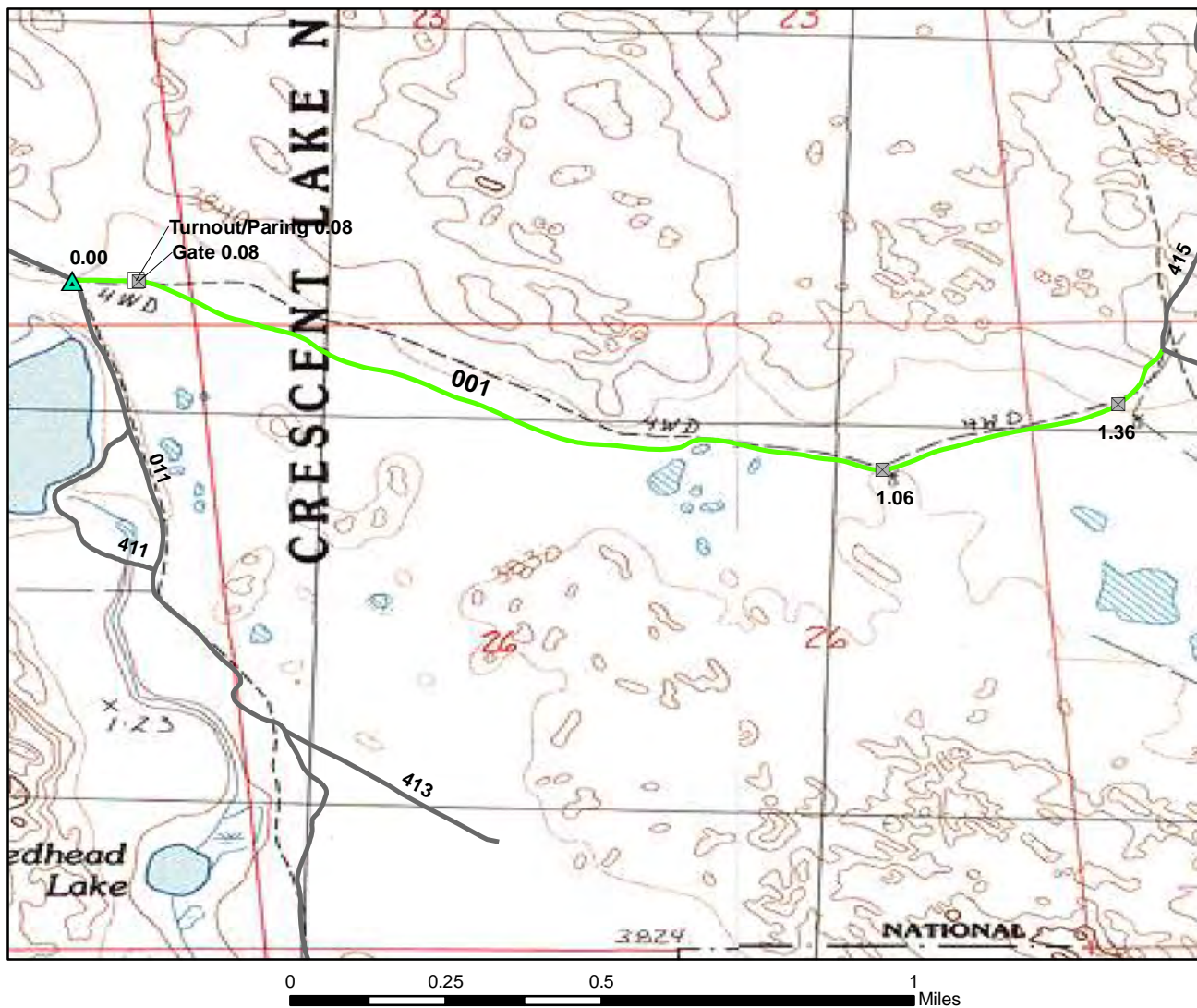
ROUTE: 413 South Boyd Road

TOTAL LENGTH: 0.31Miles

ASSET: 10030365

RTE DESCRIPTION: From Moore Valley Public South Road (Rte 011) to wet area

Section Number	001				
Section Length (miles)	0.31				
Inspection Date	5/14/2008				
Section Information					
Surface Type	Primitive				
Number of Lanes	1				
Roadway Width (feet)	10				
Roadway Condition Information					
Condition	Fair				
Remaining Service Life (years)	4				
Cost Estimate	\$200				
CRV	\$0				



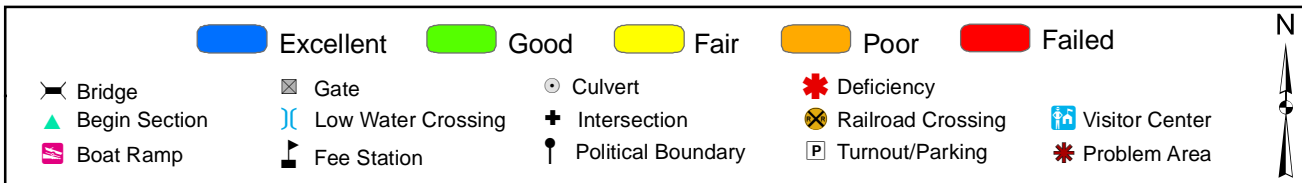
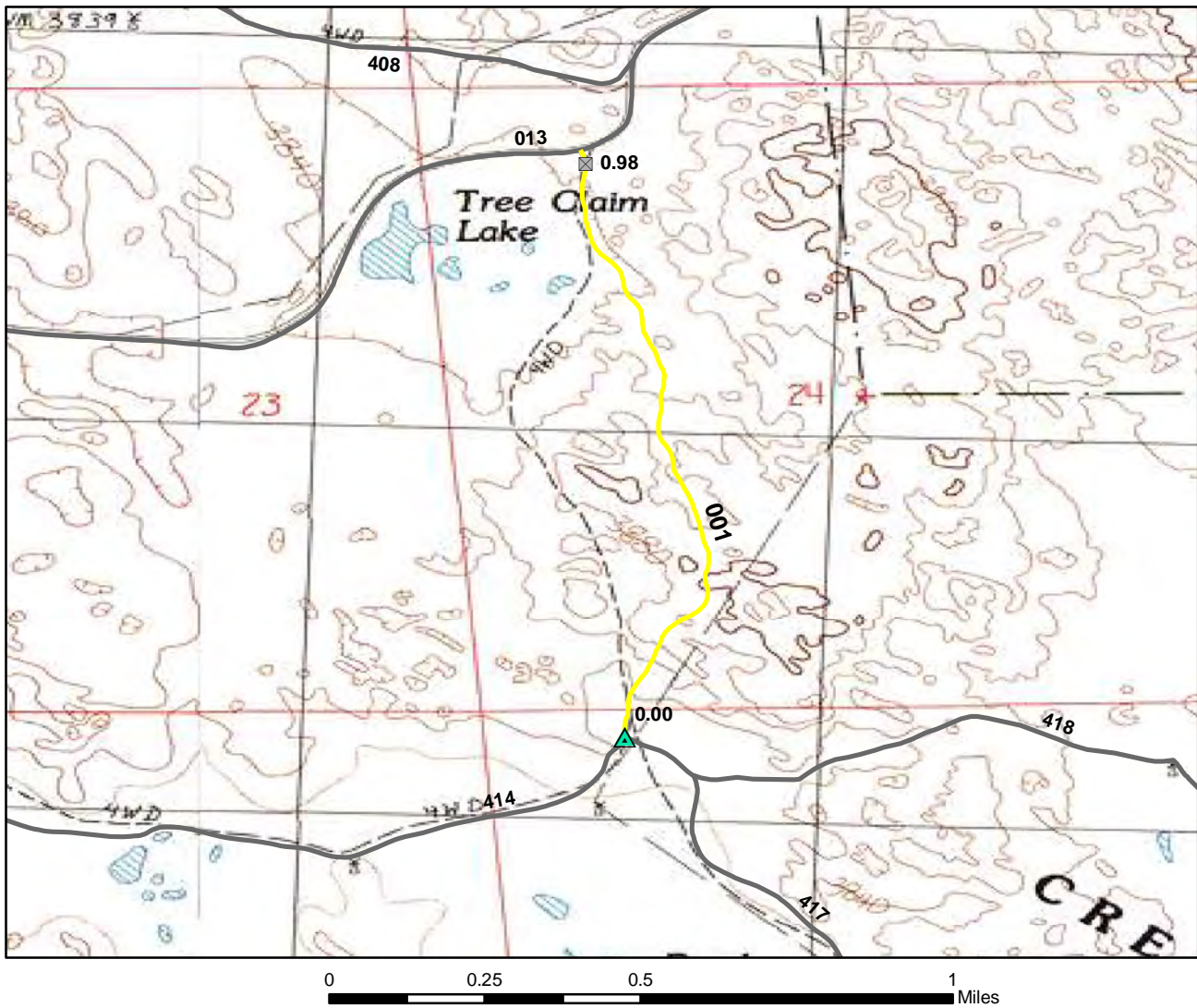
ROUTE: 414 Boyd Road

TOTAL LENGTH: 1.46 Miles

ASSET: 10030365

RTE DESCRIPTION: From Moore Valley Public South Road (Rte 011) to South Tree Claim Road (Rte 415)

Section Number	001				
Section Length (miles)	1.46				
Inspection Date	5/14/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	8				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$2600				
CRV	\$529700				



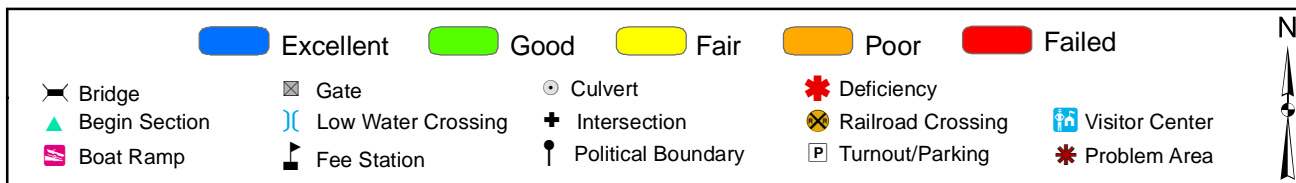
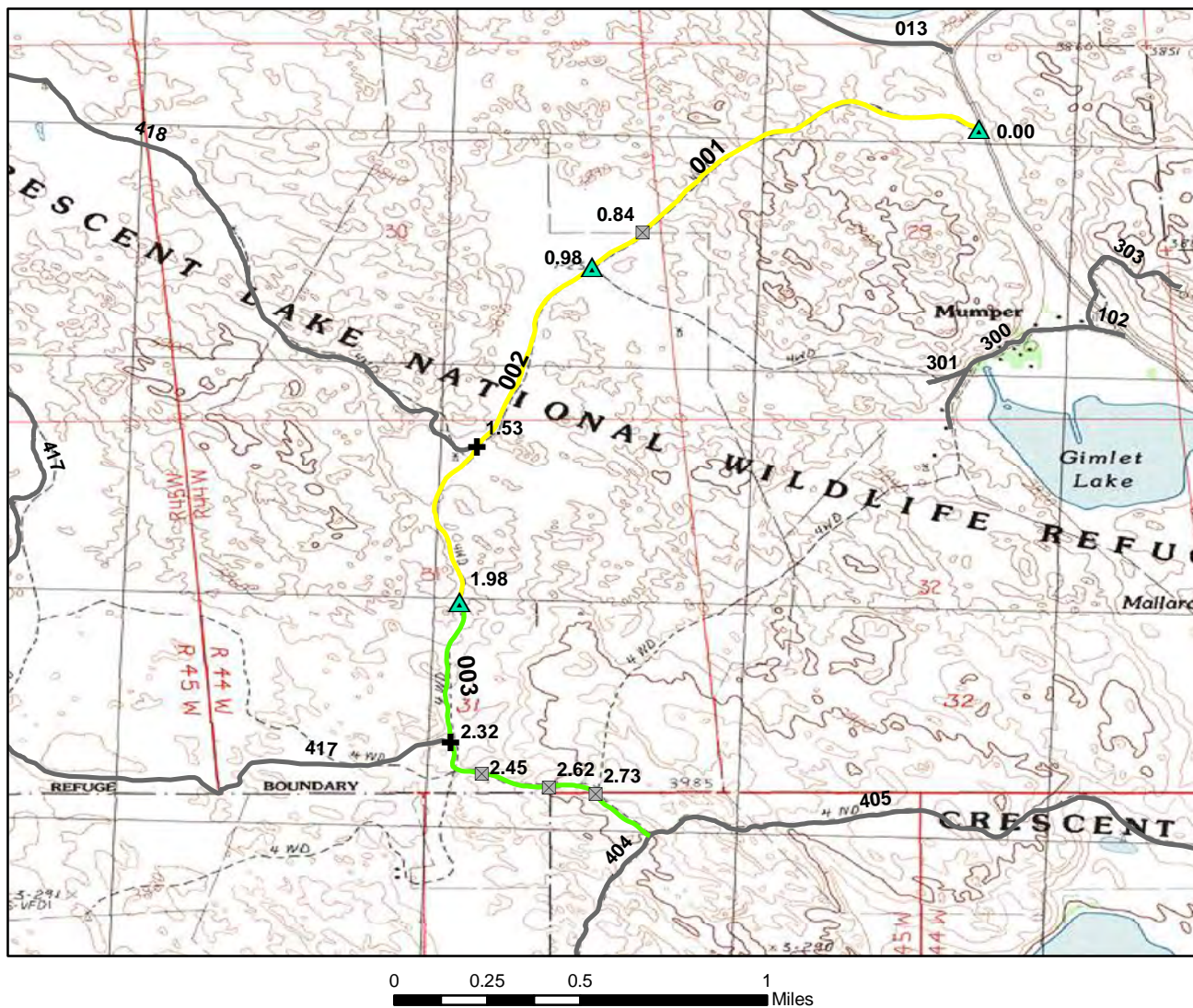
ROUTE: 415 South Tree Claim Road

TOTAL LENGTH: 1.01 Miles

ASSET: 10030365

RTE DESCRIPTION: From Barret Road (Rte 418) to West Mail Road (Rte 013)

Section Number	001				
Section Length (miles)	1.01				
Inspection Date	5/14/2008				
Section Information					
Surface Type	Primitive				
Number of Lanes	1				
Roadway Width (feet)	8				
Roadway Condition Information					
Condition	Fair				
Remaining Service Life (years)	3				
Cost Estimate	\$700				
CRV	\$0				

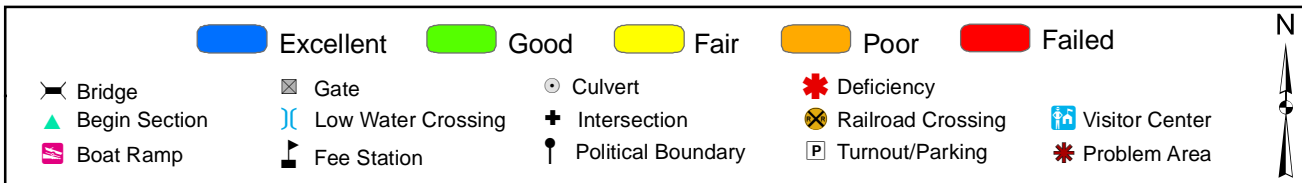
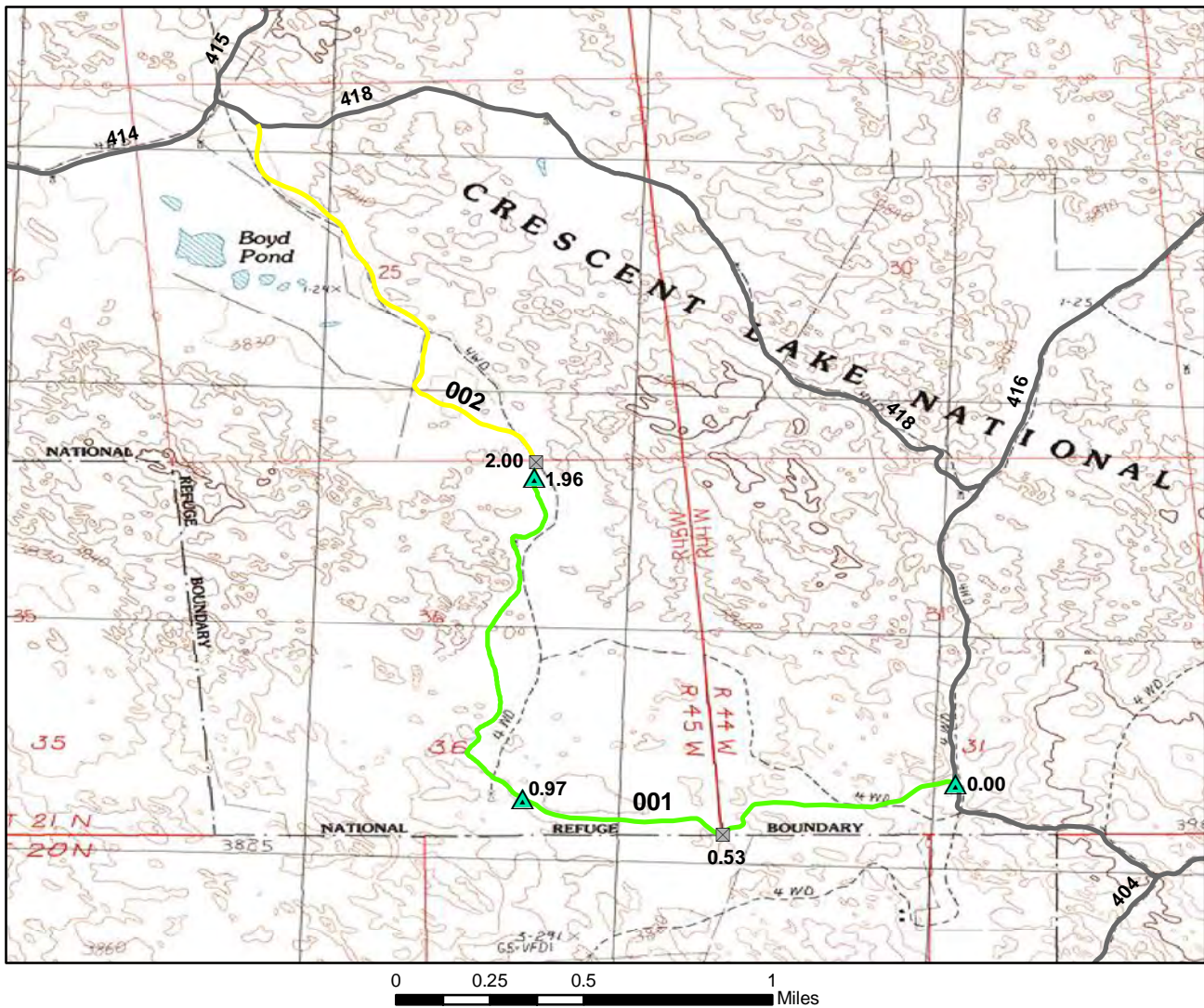


ROUTE: 416 Roberts Road TOTAL LENGTH: 2.90 Miles

ASSET: 10030365

RTE DESCRIPTION: From Road 181 to West Jones Road (Rte 404)

Section Number	001	002	003		
Section Length (miles)	0.98	1.00	0.92		
Inspection Date	5/14/2008	5/14/2008	5/14/2008		
Section Information					
Surface Type	Native	Native	Native		
Number of Lanes	1	1	1		
Roadway Width (feet)	8	8	8		
Roadway Condition Information					
Condition	Fair	Fair	Good		
Remaining Service Life (years)	3	3	5		
Cost Estimate	\$2200	\$2200	\$1600		
CRV	\$355200	\$364600	\$334100		

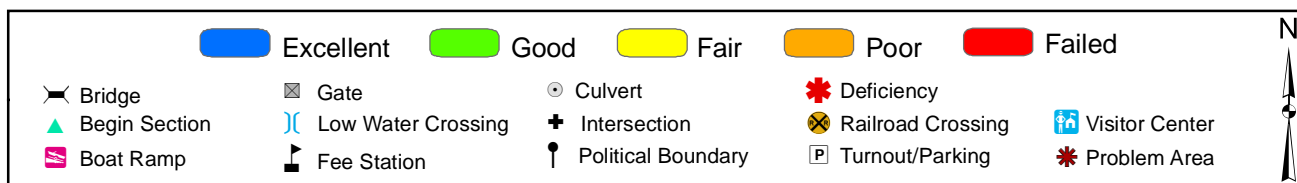
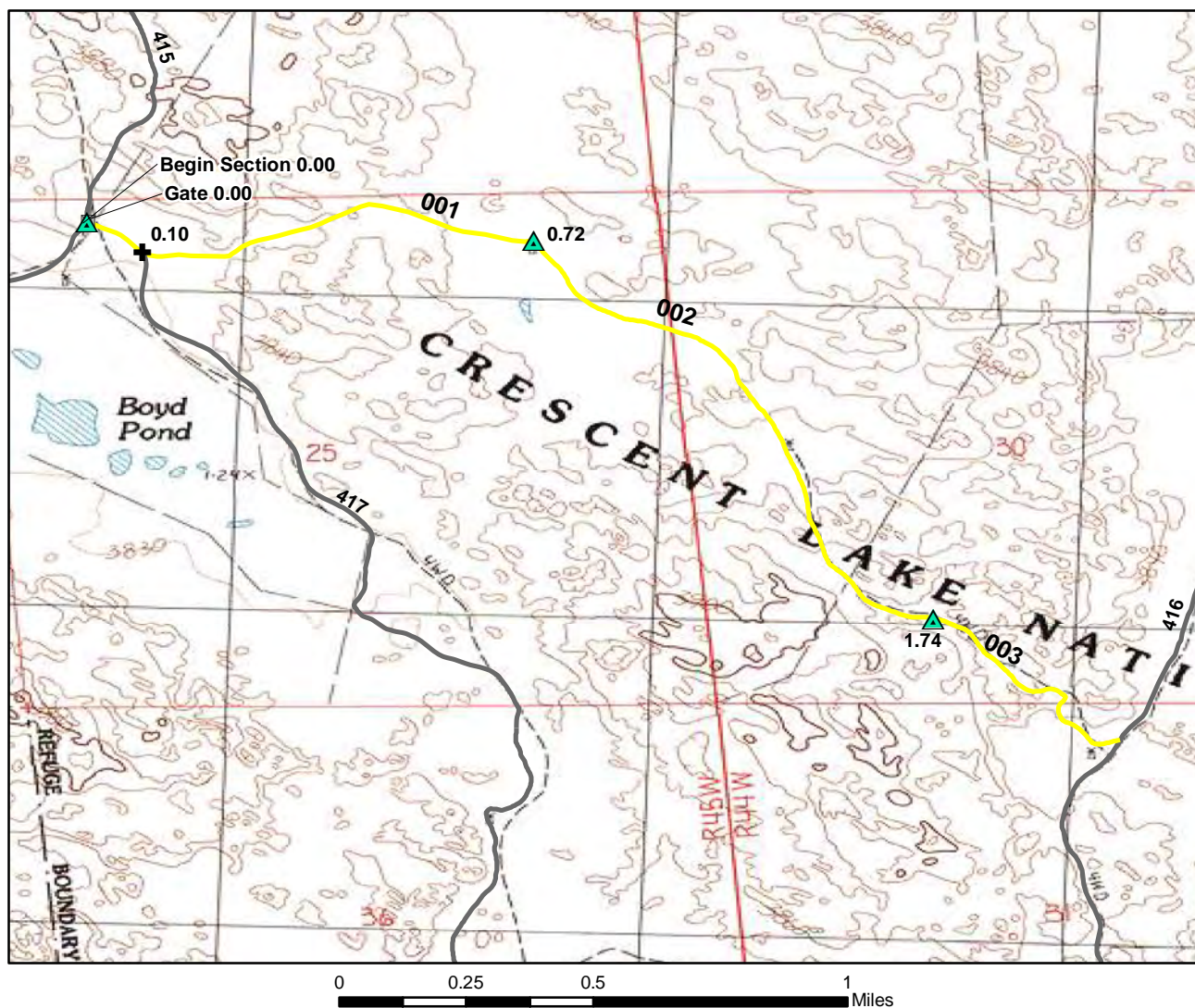


ROUTE: 417 School Section Road TOTAL LENGTH: 3.16 Miles

ASSET: 10030365

RTE DESCRIPTION: From Roberts Road (Rte 416) to Barrett Road (Rte 418)

Section Number	001	002	003		
Section Length (miles)	0.97	0.99	1.20		
Inspection Date	5/14/2008	5/14/2008	5/14/2008		
Section Information					
Surface Type	Primitive	Primitive	Primitive		
Number of Lanes	1	1	1		
Roadway Width (feet)	8	8	8		
Roadway Condition Information					
Condition	Good	Good	Fair		
Remaining Service Life (years)	5	7	4		
Cost Estimate	\$400	\$400	\$900		
CRV	\$0	\$0	\$0		



ROUTE: 418 Barret Road

TOTAL LENGTH: 2.16 Miles

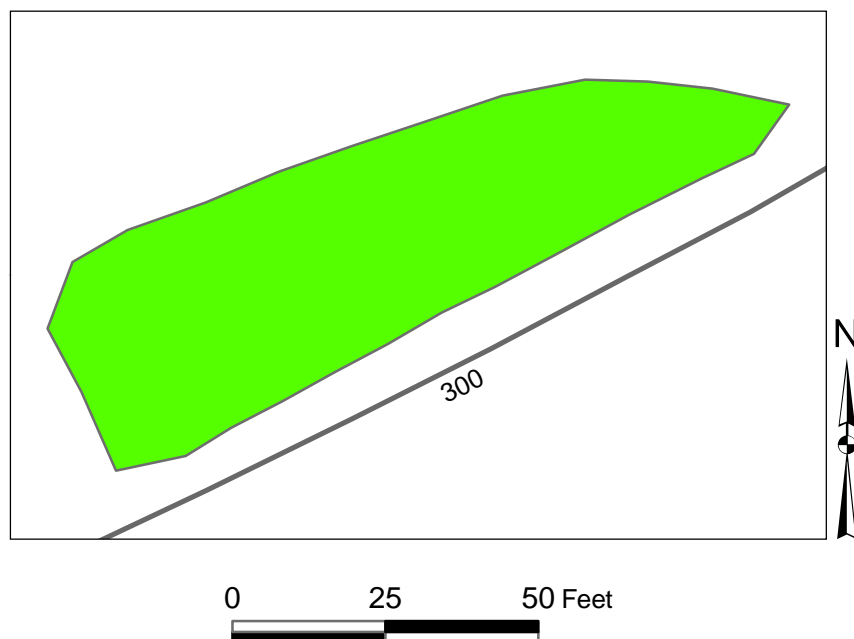
ASSET: 10030365

RTE DESCRIPTION: From South Tree Claim Road (Rte 415) to Roberts Road (Rte 416)

Section Number	001	002	003		
Section Length (miles)	0.72	1.02	0.42		
Inspection Date	5/14/2008	5/14/2008	5/14/2008		
Section Information					
Surface Type	Primitive	Primitive	Native		
Number of Lanes	1	1	1		
Roadway Width (feet)	8	8	8		
Roadway Condition Information					
Condition	Fair	Fair	Fair		
Remaining Service Life (years)	3	4	4		
Cost Estimate	\$500	\$700	\$900		
CRV	\$0	\$0	\$154100		

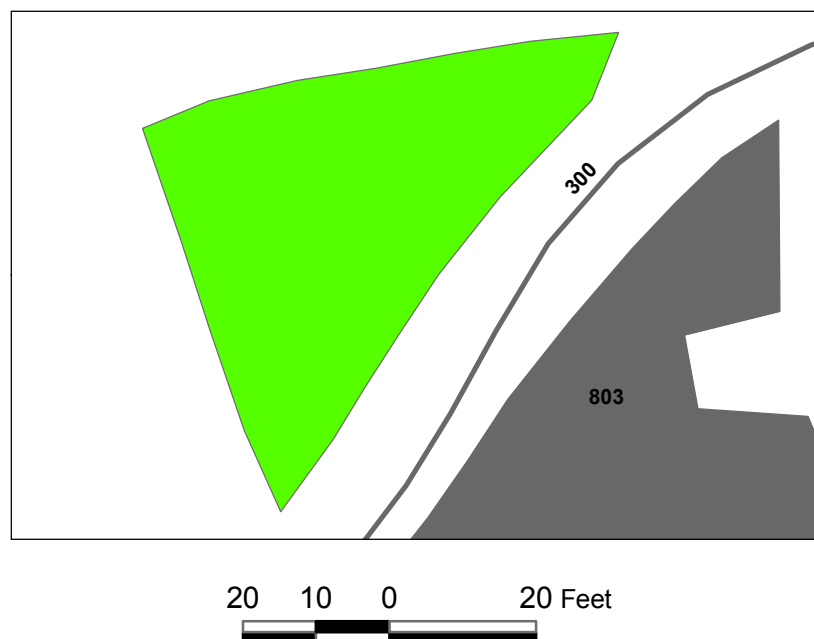
Route 801: Service Parking 2

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10030365	5/13/2008	Native	2558	Good	\$400



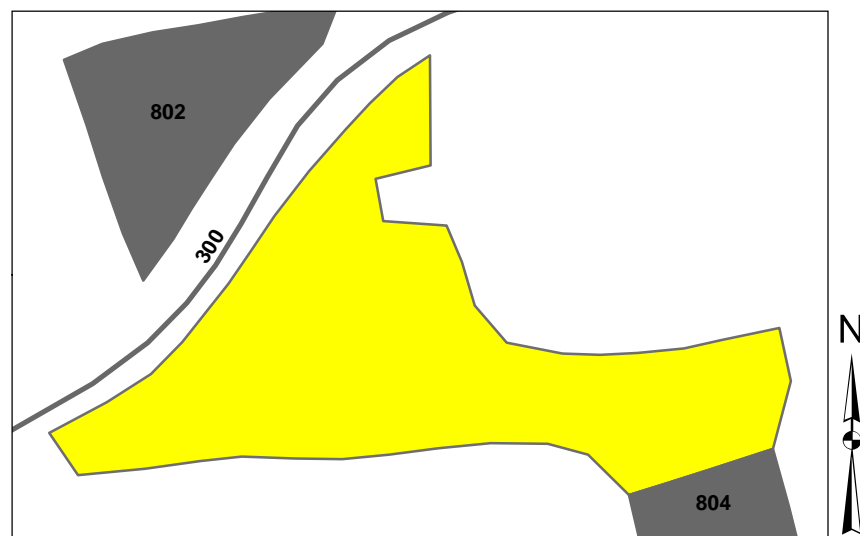
Route 802: Service Parking 3

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10030365	5/13/2008	Gravel	1459	Good	\$200



Route 803: Service Parking 4

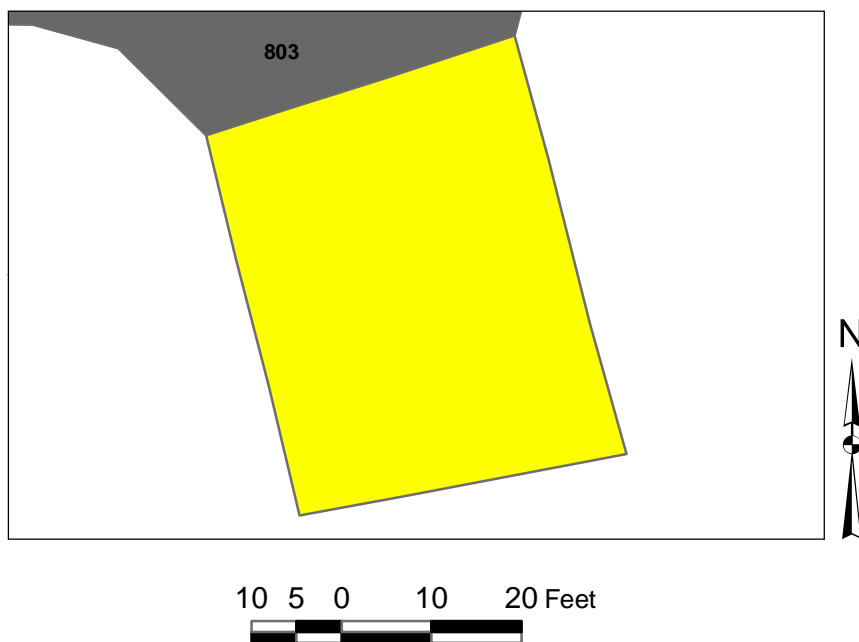
Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10030365	5/13/2008	Gravel	5067	Fair	\$1400



20 10 0 20 40 Feet

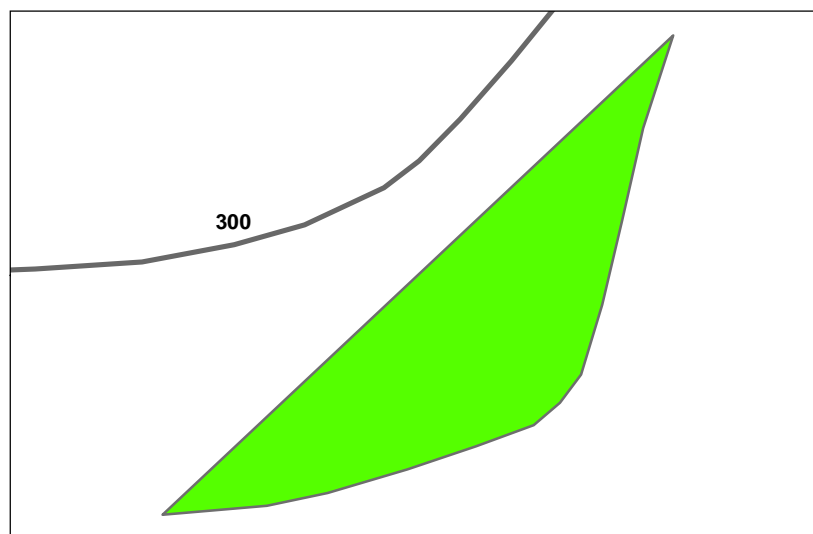
Route 804: Service Parking 5

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10030365	5/13/2008	Native	1241	Fair	\$300



Route 805: Service Parking 6

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10030365	5/13/2008	Native	1161	Good	\$200

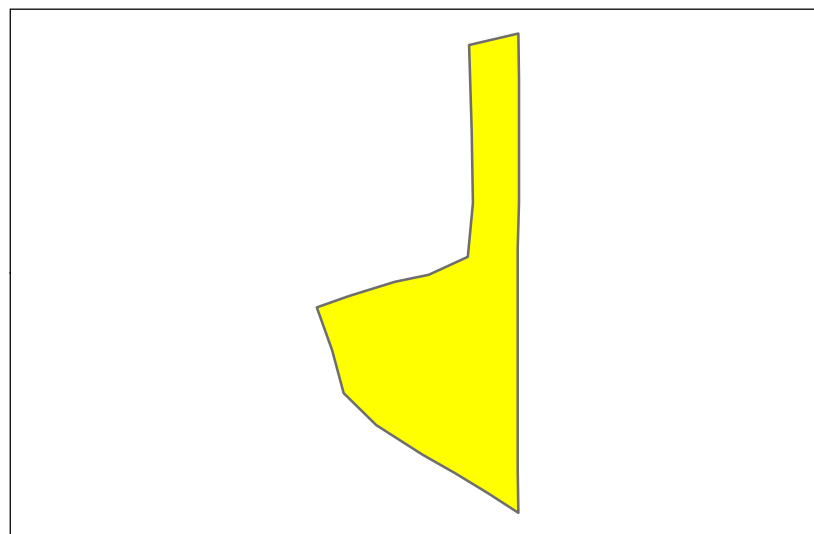


10 5 0 10 20 Feet

A scale bar with markings for 10, 5, 0, 10, and 20 feet.

Route 806: Service Parking 7

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10030365	5/13/2008	Gravel	2261	Fair	\$600

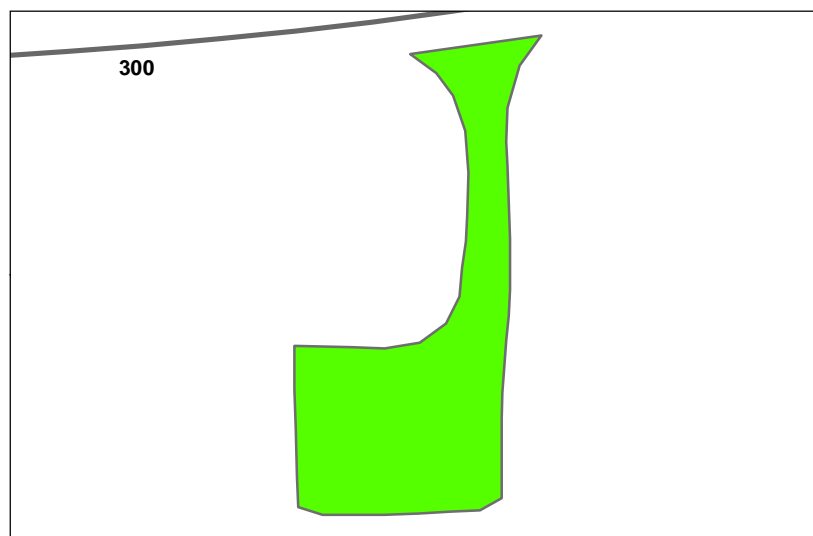


20 10 0 20 40 60 Feet



Route 807: Employee Quarters Parking

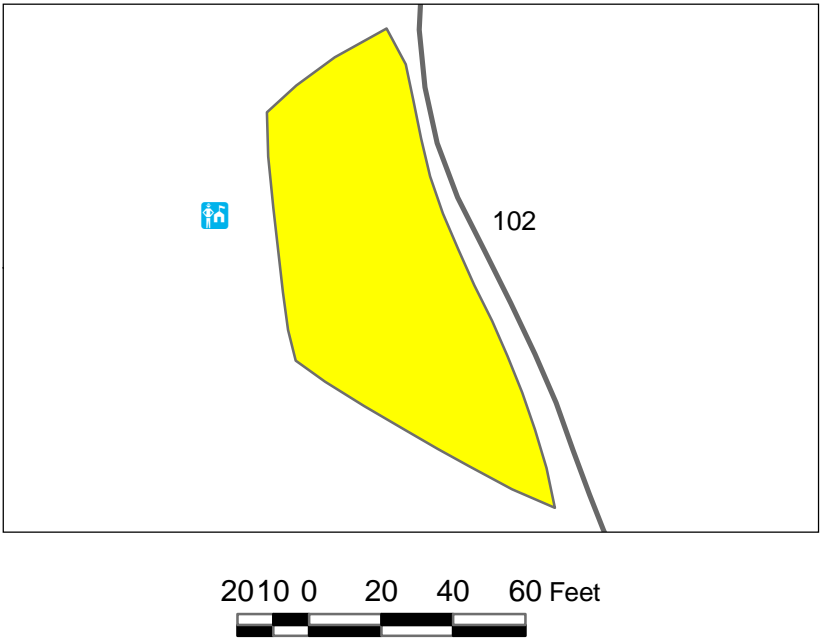
Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10030365	5/13/2008	Gravel	4678	Good	\$700



30 15 0 30 60 Feet

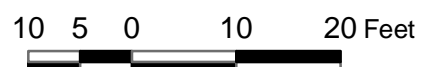
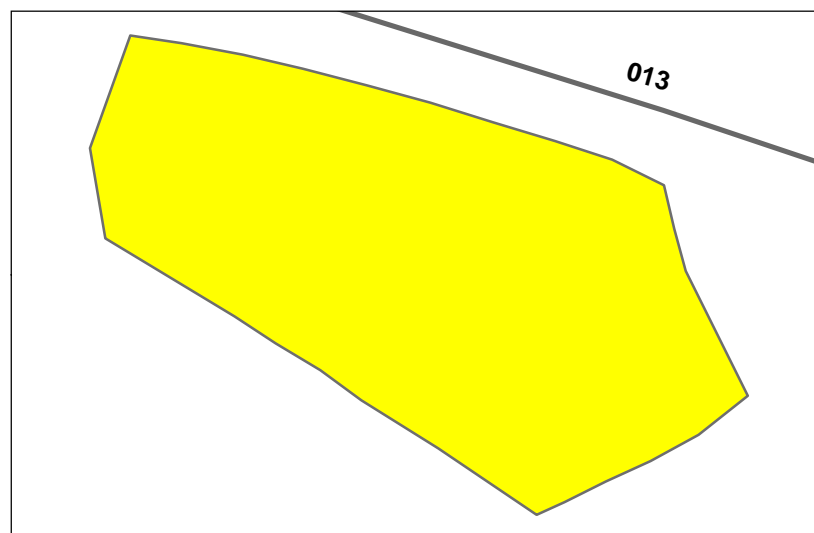
Route 901: Headquarters Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10030375	5/13/2008	Gravel	3962	Fair	\$1100



Route 902: West Mail Road Kiosk Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10030374	5/13/2008	Gravel	1243	Fair	\$300



Route 919: Wildlife Trailhead Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
	5/13/2008	Gravel	1608	Good	\$200



10 5 0 10 20 Feet

Rte #	Milepost	NBIS #	Sufficiency Rating	Functionally Obsolete	Structurally Deficient
No bridges to report					

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 012 ROUTE NAME: Island Lake Loop Road



Photo # 5297 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 013 ROUTE NAME: West Mail Road



Photo # 5292 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 013 ROUTE NAME: West Mail Road



Photo # 5293 - MP 1.06 - Begin Section 002

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 013 ROUTE NAME: West Mail Road



Photo # 5299 - MP 1.48 - Begin Section 003

ROUTE NUMBER: 013 ROUTE NAME: West Mail Road



Photo # 5300 - MP 2.52 - Begin Section 004

ROUTE NUMBER: 013 ROUTE NAME: West Mail Road



Photo # 5301 - MP 3.52 - Begin Section 005

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 013 ROUTE NAME: West Mail Road



Photo # 5302 - MP 4.51 - Begin Section 006

ROUTE NUMBER: 101 ROUTE NAME: Island Lake Spur Road



Photo # 5298 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 102 ROUTE NAME: Vistor Center Access Road



Photo # 5274 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 102 ROUTE NAME: Vistor Center Access Road



Photo # 5275 - MP 0.07 - Begin Section 002

ROUTE NUMBER: 300 ROUTE NAME: Main HQ Service Road



Photo # 5276 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 301 ROUTE NAME: West Equipment Storage Road



Photo # 5277 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 302 ROUTE NAME: South Tower Road



Photo # 5317 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 303 ROUTE NAME: Radio Tower Road



Photo # 5335 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 400 ROUTE NAME: Lost Lake Road



Photo # 5296 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 400 ROUTE NAME: Lost Lake Road



Photo # 5336 - MP 1.06 - Begin Section 002

ROUTE NUMBER: 400 ROUTE NAME: Lost Lake Road



Photo # 5339 - MP 0.27 - Begin Section 003

ROUTE NUMBER: 400 ROUTE NAME: Lost Lake Road



Photo # 5337 - MP 0.59 - Begin Section 004

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 401 ROUTE NAME: Crane Loop Road



Photo # 5311 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 401 ROUTE NAME: Crane Loop Road



Photo # 5312 - MP 1.05 - Begin Section 002

ROUTE NUMBER: 402 ROUTE NAME: Shafer Lake Road



Photo # 5313 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 403 ROUTE NAME: Hackberry Road



Photo # 5318 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 403 ROUTE NAME: Hackberry Road



Photo # 5320 - MP 1.00 - Begin Section 002

ROUTE NUMBER: 404 ROUTE NAME: West Jones Road



Photo # 5322 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 404 ROUTE NAME: West Jones Road



Photo # 5323 - MP 0.98 - Begin Section 002

ROUTE NUMBER: 404 ROUTE NAME: West Jones Road



Photo # 5325 - MP 1.99 - Begin Section 003

ROUTE NUMBER: 404 ROUTE NAME: West Jones Road



Photo # 5326 - MP 3.74 - Begin Section 004

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 405 ROUTE NAME: North Hackberry Road



Photo # 5327 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 405 ROUTE NAME: North Hackberry Road



Photo # 5328 - MP 0.99 - Begin Section 002

ROUTE NUMBER: 406 ROUTE NAME: West Island Road



Photo # 5330 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 407 ROUTE NAME: Roundup Road



Photo # 5331 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 407 ROUTE NAME: Roundup Road



Photo # 5332 - MP 0.16 - Begin Section 002

ROUTE NUMBER: 407 ROUTE NAME: Roundup Road



Photo # 5333 - MP 0.16 - Begin Section 003

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 408 ROUTE NAME: North Tree Claim Road



Photo # 5340 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 409 ROUTE NAME: West Smith Road



Photo # 5345 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 409 ROUTE NAME: West Smith Road



Photo # 5351 - MP 0.96 - Begin Section 002

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 411 ROUTE NAME: Perrin Lake Road



Photo # 5357 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 412 ROUTE NAME: Harrison Lake Road



Photo # 5362 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 413 ROUTE NAME: South Boyd Road



Photo # 5366 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 414 ROUTE NAME: Boyd Road



Photo # 5368 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 415 ROUTE NAME: South Tree Claim Road



Photo # 5372 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 416 ROUTE NAME: Roberts Road



Photo # 5374 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 416 ROUTE NAME: Roberts Road



Photo # 5376 - MP 0.98 - Begin Section 002

ROUTE NUMBER: 416 ROUTE NAME: Roberts Road



Photo # 5377 - MP 1.98 - Begin Section 003

ROUTE NUMBER: 417 ROUTE NAME: School Section Road



Photo # 5381 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 417 ROUTE NAME: School Section Road



Photo # 5383 - MP 0.97 - Begin Section 002

ROUTE NUMBER: 417 ROUTE NAME: School Section Road



Photo # 5384 - MP 1.96 - Begin Section 003

ROUTE NUMBER: 418 ROUTE NAME: Barret Road



Photo # 5387 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 418 ROUTE NAME: Barret Road



Photo # 5388 - MP 0.72 - Begin Section 002

ROUTE NUMBER: 418 ROUTE NAME: Barret Road



Photo # 5389 - MP 1.74 - Begin Section 003

**Crescent Lake NWR
Accident Summary**

Number of Accidents Reported	Timespan of Accidents	Injuries	Fatalities
2	11/2/2002 - 5/14/2003	0	0

APPENDIX

FWS ROAD FUNCTIONAL CLASSIFICATION	
Class I	Principal Refuge Road (Public Roads) - Routes that constitute the main access route, main auto tour route, or thoroughfare for refuge visitors. These routes are accessible by 2WD vehicles. Routes are numbered from 10 to 99.
Class II	Connector Refuge Road (Public Roads) - Routes that provide circulation within the refuge. These routes can also provide access to areas of scenic, scientific, recreational or cultural interest, such as overlooks, campgrounds, education centers, etc. These routes are accessible by 2WD vehicles. Routes are numbered from 100 to 199.
Class III	Special Purpose Refuge Road (Public Roads) - Roads that provide circulation within special use areas such as campgrounds or public concessionaire facilities or access to remote areas of the refuge. These routes may not be 2WD accessible. Routes are numbered from 200 to 299
Class IV	Administrative Access Road (Administrative Roads) - Routes intended for access to administrative developments or structures such as maintenance offices, employee quarters, or utility areas. These routes are accessible by 2WD vehicles. These routes may restrict access to the general public. Routes are numbered from 300 to 399.
Class V	Restricted Road (Administrative Roads) - Routes normally closed to the public, such as maintenance roads, service roads, patrol roads, and fire breaks. These routes may be open to the public for a short period of time for a special use, such as hunting access. These routes may not be 2WD accessible. Routes are numbered from 400 to 499.

A refuge road system contains those routes within or giving access to a refuge or other unit of the FWS that are administered by the FWS, or by the Service in cooperation with other agencies. The assignment of a functional classification (FC) to a refuge road is not based on traffic volumes or design speed, but on the intended use or function of that route.

DESCRIPTION OF RATING SYSTEM

Rating Data is collected on four different surface types: Asphalt, Concrete, Gravel, and Native. The Utah LTAP Center's Remaining Service Life (RSL) system is used for all surface types. The RSL system is based on the Strategic Highway Research Program's (SHRP) Distress Identification Manual.

Asphalt Rating System

Data is collected on the following distresses and conditions:

- **Fatigue Cracking** - Interconnected cracks forming small irregular shapes.
- **Longitudinal Cracking** - Cracks running parallel with the roadway, in the direction of traffic.
- **Transverse Cracking** - Cracks perpendicular to the roadway, going across the lane or lanes.
- **Block Cracking** - Interconnected cracks forming large blocks.
- **Edge Cracking** - Cracks running along the edge of the pavement surface.
- **Patches** - Original surface repaired with new asphalt patch material.
- **Potholes** - Holes or depressions in the pavement.
- **Rutting** - surface depressions in the wheel paths.
- **Roughness** - Evenness of pavement for serviceability.
- **Drainage** - Ability of the road surface to drain water based on proper slope.

A Condition Rating value is calculated for each homogenous pavement section, and can be up to 1 mile in length.

Rating Index Formula

Fatigue, longitudinal, transverse, block, and edge cracking, along with patching and potholes are rated on a 0 - 9 scale (0 = no distress, 9 = maximum distress). The rating given is based on the extent and the severity of the distress. Rutting, roughness, and drainage are rated on a 0 - 3 scale (0 = excellent, 3 = poor). Each distress type has given Remaining Service Life (RSL) values (in years) based on the rating for that particular distress. The distress with the rating resulting in the lowest RSL value is considered to be the governing distress. That value is then assigned as the RSL of the road segment.

Concrete Rating System

Data is collected on the following distresses and conditions:

- **Spalling of Joints** - Chipping, breaking, or cracking of slab edges
- **Joint Seal Damage** - Any damage or condition that enables materials or water to infiltrate into the joint from the surface.
- **Corner Breaks** - A portion of the slab separated by a crack that intersects the adjacent transverse and longitudinal joints, forming approximately a 45° angle to the direction.
- **Broken Slabs** - Faulting and/or cracking localized to individual slabs.
- **Faulting** - Difference in elevation across a crack or joint.
- **Longitudinal Cracking** - Cracks in the pavement running parallel to road.

- **Transverse Cracking** - Cracks in the pavement running perpendicular to the direction of traffic.
- **Patch Deterioration** – Faulting, settling, or cracking of previously placed patch
- **Map Cracking** – A series of cracks that extend only into the upper surface of the Slab

A Condition Rating value is calculated for each homogenous pavement section, and can be up to 1 mile in length.

Rating Index Formula

The rating procedure for concrete pavement is the same as that for asphalt pavement described previously. Each of the distresses described above are rated on the same 0 – 9 scale. The governing distress is then determined and the RSL associated with that distress is assigned to the road segment.

Gravel and Native Rating System

Data is collected on the following distresses and conditions:

- **Cross Section (Crown)** - Roadway built so that the center is higher than the shoulder, to prevent water from pooling on roadway.
- **Roadside Drainage** - Roadside ditches and culverts to handle water flow and prevent pooling on the roadside.
- **Corrugations (Washboarding)** - Small trenches or holes developing perpendicular to the roadway.
- **Potholes** - Holes or depressions in the roadway.
- **Rutting** - Depressions running parallel with the roadway, in the wheelpaths.
- **Dust** - Amount of dust caused by traffic.
- **Loose Aggregate (Gravel Only)** - Loose gravel, typically piled up on the roadway edges or centerline.

A Condition Rating value is calculated for each homogenous pavement section, and can be up to 1 mile in length.

Rating Index Formula

The rating procedure for unpaved roads is the same as that for asphalt and concrete pavements described previously. Of the distresses described above, corrugations, potholes, rutting, and loose aggregate are rated on the same 0 – 9 scale previously mentioned. Cross section, roadside drainage, and dust are rated on the same 0 – 3 scale described for asphalt pavement. The governing distress is then determined and the RSL associated with that distress is assigned to the road segment.

Condition Descriptions by Surface Type

The following definitions are used to describe pavement condition for the various surface types. These are general guidelines for condition indications.

Asphalt

Excellent – Recently constructed or overlaid road where construction or overlay was performed correctly- No maintenance required. RSL = 19-20 years.

Good – Low extent longitudinal and transverse cracks. All cracks are 1/4" or less with little or no crack erosion. Patches are in good condition and applied correctly. Routine Maintenance recommended. RSL = 13-18 years.

Fair - Roads are in good structural condition with little or no fatigue cracking. Longitudinal, transverse, and edge cracking is at medium extent and severity. Block cracking is not extensive. Any patches are in good condition. Preventative maintenance recommended. RSL = 7-12 years.

Poor - Road beginning to show signs of structural distress. Fatigue cracking is medium to high extent and medium severity. Cracking will be severe. Surface may have severe block cracking and show. Patches are in fair to poor condition. There is moderate distortion or rutting and occasional potholes. Rehabilitation recommended. RSL = 1-6 years.

Failed - Road is severely deteriorated. Signs of structural failure appear along with severe and extensive fatigue cracking, distortion, potholes, or extensive patches in poor condition. Reconstruction recommended. RSL = 0 years.

Concrete

Excellent - New pavement. No maintenance required. RSL = 19-20 years

Good - First signs of transverse cracking, patch or repair, more extensive pop-outs, or scaling. Sealing or routine maintenance recommended. RSL = 13-18 years.

Fair – Pavement has joint or crack spalling, and/or faulting, along with cracking at corners with broken pieces. Any Patches are in fair condition and faulting is at a minimum. Preventative maintenance recommended. RSL = 7-12 years.

Poor - Joints and cracks are open 1 inch, spalled, or patched. Faulting is more severe. Rehabilitation recommended. RSL = 1-6 years.

Failed - Most slabs have failed structurally, and faulting is severe. Reconstruction recommended. RSL = 0 years.11-9

The following table shows the relationship between RSL and condition.

SUBJECTIVE CONDITION RATING FOR REMAINING SERVICE LIFE (Asphalt and Concrete Pavements)								
	FAILED	POOR		FAIR		GOOD		EXCELLENT
RSL Years	0	1-3	4-6	7-9	10-12	13-15	16-18	19-20

Gravel and Native

Note - Native surfaces do not have a gravel layer.

Excellent - Newly constructed road that has been constructed properly with proper crown, drainage and gravel layer. Little or no distress. No maintenance recommended. RSL = 8-10 years.

Good - Crown, drainage provisions, and gravel layer are in good condition. Distress limited to traffic effects such as dust, loose aggregate, and low severity corrugations (wash boarding). RSL = 5-7 years.

Fair - Adequate drainage and crown through majority of roadway. Crown repair, ditch improvement may be necessary. Road has more severe corrugations and potholes. Preventative maintenance recommended. RSL = 3-4 years.

Poor - Travel at slow speeds is necessary. Additional gravel layer needed to carry traffic. Poor crown. Ditching is inadequate and rutting is extensive and severe. Rehabilitation recommended. RSL = 1-2 years.

Failed - Travel is difficult, and road may be closed at times. Rutting and Corrugations are very severe. Total Reconstruction of road is recommended. RSL = 0 years.

The following table shows the RSL values for gravel and native roads in terms of excellent, good, fair, poor, and failed condition.

SUBJECTIVE CONDITION RATING FOR REMAINING SERVICE LIFE (Gravel and Native Surfaces)					
	FAILED	POOR	FAIR	GOOD	EXCELLENT
RSL Years	0	1-2	3-4	5-7	8-10